

LIFETIME EMPLOYMENT PATTERNS  
OF MARRIED WOMEN

By

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A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL  
OF THE UNIVERSITY OF FLORIDA IN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1980

To Jack

## ACKNOWLEDGEMENTS

This research has benefited from the suggestions and assistance of many.

First of all, I would like to thank my chairman, Dr. John Henretta, for all the time and effort he spent assisting me over the past three years. His methodological assistance and his intellectual concern and enthusiasm for the project were invaluable to me. I also appreciate his aid and encouragement in obtaining outside support for this dissertation. My graduate education has been enhanced immensely by our association.

This research was supported by National Science Foundation Dissertation Grant SOC-7913975. Without this support and the support of the Department of Sociology and the Center for Gerontological Studies, this research would not have been possible. The analyses used in this presentation were performed using the facilities of the Northeast Regional Data Center and the Center for Instructional and Research Computing Activities.

I would like to express special appreciation to Dr. Cynthia Rexroat, who worked diligently with me even before she was a committee member. This dissertation has been much improved by her prompt and conscientious reading and

editing of earlier drafts. She is also a wonderful friend whom I will miss.

Dr. Leonard Beeghley is another friend and advisor to whom I owe a great debt of gratitude. His support and encouragement have extended throughout my graduate career. Above all, his enthusiasm for my work has given me confidence in myself.

I also would like to thank my other committee members, Drs. Felix Berardo, Benjamin Gorman and Henry Fishkind, for their support and their comments on earlier drafts.

These remarks would be incomplete without special thanks to Dr. Angela O'Rand. Although she was a member of my committee for only a short time, her input to this project was invaluable. She aided me in conceptualizing the research and has been a continuing source of encouragement and support.

Finally, there is an additional group of friends whose unfailing emotional support has made possible the completion of this work. Among these are Mary Ann Hilker, Hugh Potter, and Dr. Jose DelaTorre.

To Jack, my husband, I owe the greatest debt of gratitude. Although he has suffered much throughout my graduate education, his love and support have been unceasing.

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Abstract of Dissertation Presented to  
the Graduate Council of the University of Florida  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

LIFETIME EMPLOYMENT PATTERNS  
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BY

Ellen Van Velsor

December, 1980

Chairman: Dr. John C. Henretta  
Major Department: Sociology

This study deals with the process of wives' employment over the first three stages of the family life cycle and the background and fertility characteristics related to this process. A typology of employment patterns is constructed by tapping employment during the first three stages of the family life cycle. Twelve patterns are found to describe the worklives of ninety-seven percent of the women in this sample. Employment pattern contrasts are used to assess the relationships between background and fertility characteristics and the following: 1) employment 2) employment, continuity 3) employment before childbearing, 4) employment during childbearing, and 5) employment after childbearing.

The analysis begins by contrasting wives never and ever-employed over the first three stages of the family life cycle. The only generalization that can be made across cohorts is that the number of children a wife bears has a significant negative impact on her probability of employment. Older wives tended not to work when they had a large number of children and/or when their education (i.e., their potential wage) was low. Younger wives tended not to work when they had a large number of children, when their husbands' education (i.e., income) was high, when marriage (and thus, childbearing) was begun late in life, and/or when childbirth followed quickly after marriage.

Two generalizations can be made across cohorts regarding employment continuity. One is that the higher the frequency of geographical mobility, the lower the probability that wives will remain continuously employed. The second is that the greater the number of children, the lower the probability that wives will remain continuously employed. The older wives most likely to have been employed discontinuously were those who had made frequent long-distance moves and those who had had several children an average of two to four years apart. The younger wives most likely to have been employed discontinuously were those who had moved frequently, those who had had several children (regardless of their birth spacing), and those who had non-farm backgrounds.

The only factor related to employment before childbearing across cohorts was the length of the interval between marriage and first birth. Both a short first life cycle interval and frequent geographical mobility were associated with a decrease in younger wives' probability of first state employment. Among older wives, a long first life cycle interval was associated with an increased probability of employment before childbearing, while having had four or more years of college was associated with a decreased probability of employment during stage one.

Employment during childbearing can be attributed to no one factor or group of factors for all wives. A highly educated husband, a high frequency of geographical mobility and close birth spacing were all associated with a decrease in younger wives' probability of employment during childbearing, while downward marital mobility was associated with an increase in younger wives' probability of employment during this stage. Among older wives, a short interval between marriage and first birth was associated with an increase in the probability of employment during childbearing.

In both cohorts, marital timing and number of children are the only factors associated with work force reentry after childbearing. For younger wives, initial employment

in mid-life is related to these same variables. For older wives, only wife's education is significant. This finding confirmed the earlier finding that older wives with little education tended to remain never-employed.

## CHAPTER I INTRODUCTION

### Measuring Wives' Employment

The extent of labor market activity among various social groups and the forms it takes are two crucial aspects of labor force participation. The employment of married men and women differs vastly in both these regards. For men, participation in the work force is relatively continuous and, for the most part, full-time from the curtailment of education to retirement.<sup>1</sup> The employment of married women is typically discontinuous and is patterned around life cycle events such as marriage and childbearing. In addition to its discontinuity, the female labor force is characterized by intra-group variability in work patterns. Some women never engage in paid employment, while some work only before their children are born. Others may be employed before and after childbearing, but may remain at home while their children are small. Some wives are employed continuously in every stage, either in pursuit of a career or out of economic necessity. Others enter the work force for the first time once their children are in school.

This individual discontinuity and intra-group variability has hindered attempts to explain female labor force

participation in that the typical ways of measuring this variable have proven inappropriate for women. For example, until recently research has relied on cross-sectional aggregated data and has defined and measured labor force participation as participation at a particular time rather than as a process over the life cycle. Most studies used Census data and measured labor force participation as presence in the labor force during the survey week. However, the use of this measure improperly assumes that a woman's labor force activity in one week adequately portrays work patterns over time. When work history data are available, an alternative measure of labor force attachment is the number of years worked in the last five or ten years. Again, this measure is not necessarily indicative of the current or future labor market activity of women since the five to ten year span may have fallen during the childbearing years for some women and afterwards for others.

More recently longitudinal data on female labor market experiences have become available, facilitating clarification of the relationship between female labor force participation and life cycle events. Most current research using longitudinal data measures female employment as either the proportion of years worked since leaving school or the proportion of years worked during various life cycle stages. Both measures increase our understanding of women's worklives in

that they tap the discontinuity of female labor force participation. However, looking only at the proportion of years worked since leaving school does little to further our understanding of the variability among women in lifetime work patterns. That is, women may spend equal proportions of their lives in the work force, but the activity may occur at varying life cycle stages for different women. This consideration is an important one since time out of the labor force during the childbearing years has been shown to have a more detrimental effect on wages than time out of the labor force in later years (Polachek, 1975). Measuring labor force participation as the proportion of years worked during various life cycle stages solves this problem and points in an interesting direction. That is, if the data allow one to link labor force participation with life cycle events, certain lifetime patterns should emerge. Only two studies identify any such patterns (Elder and Rockwell, 1967; Young, 1978); and neither focuses on the classification of lifetime employment patterns among women in the United States.

If we are to understand the process of wives' employment, a measure is needed which taps both the discontinuity of women's worklives and the intra-group variability in employment timing. A typology of employment patterns satisfies both these criteria. Most married women enter,



withdraw from, and reenter the work force several times over the life cycle. Employment patterns tap this discontinuity by measuring intervals of both employment and nonemployment. Wives vary in the way they time their employment, as well; and employment patterns measure timing by indicating the life cycle stages at which employment occurs.

The present study has two goals. The first is to construct a comprehensive typology of the lifetime employment patterns of wives in the United States. This typology will be an improved measure of wives' employment in that it will describe both the extent and the timing of wives' employment over the life cycle. It is assumed that the timing of employment is associated with socioeconomic and fertility factors, which also influence wives' employability and wage rates. Thus, the second goal is to define the factors related to employment, discontinuous employment, and employment in each of the three early life cycle stages. This objective is met by assessing the effects of a set of family characteristics on several contrasts of the employment patterns encompassed in the typology.

#### Plan of Study

The literature on female employment is reviewed in Chapter II. Early analyses of the relationships between

family characteristics and wives' labor supply are reviewed first. For the most part, these are the studies which used cross-sectional data and measured wives' employment as presence in the labor force during the survey week. Some of the more recent studies of female employment have attempted to clarify the nature and direction of the relationship between fertility and labor force participation; and this large literature is reviewed next. Studies involving labor market variables and rural/urban differences in employment follow. Numerous studies deal with the relationships among factors usually associated with female employment; and these are summarized here. Another theme in the labor force literature stresses the importance of family life cycle stage as an explanatory variable. In general, these studies indicate that family and fertility characteristics act to push women into the labor force during certain stages and to encourage them to withdraw during others. The next section reviews studies of wives' employment discontinuity. Although the discontinuity of female employment is an important factor, it represents only one aspect of a complex phenomenon. Another aspect involves the forms this discontinuity takes among women. Studies of wives' employment patterns comprise the final section of the second chapter.

Chapter III includes a discussion of both employment patterns and theoretically interesting contrasts. That is,

if we wish to investigate the factors related to wives' employment, ever-employed wives can be usefully contrasted with never-employed wives. Continuous and discontinuous workers can be contrasted to study the factors related to employment discontinuity. The factors associated with employment in each life cycle stage can be analyzed similarly.

The data and methods used in the present study are discussed in Chapter IV. This chapter describes how longitudinal data were used to tap employment in each of the three early life cycle stages. It also describes the creation of fertility timing measures and other variables from these data and explains the LOGIT procedure used in this analysis.

Chapter V describes the typology of employment patterns emergent from the work histories of the wives in these data. It assesses cohort differences in the distribution of wives over these patterns and discusses the potential effects of family characteristics on the employment pattern contrasts chosen for further analysis.

The results of that analysis are presented in Chapter VI. Six models are estimated to address several issues important in studying wives' employment. The first model addresses why some wives remain never-employed, while most work for pay at some point in the family life cycle. The second concerns factors related to employment discontinuity. The third through sixth models deal with employment before, during, and after childbearing.

The final chapter summarizes the findings presented in Chapter VI and discusses both the policy-related and theoretical implications of the present research.

Note to Chapter I

<sup>1</sup>In the past thirty-five years, wives have increasingly spent more of their adult lives in the work force. The trend among men has been to delay labor force entry in favor of prolonged education and to decrease their age at retirement, resulting in a decrease over time in the number of years spent working (Neugarten and Hagestad, 1976). Although male/female differences in the extent of time spent in the labor force may have decreased since World War II, undeniable differences remain. In addition, the above trends seem to be leveling off in recent years.

## CHAPTER II LITERATURE REVIEW

### Introduction

The literature pertaining to female labor force participation is interdisciplinary and cross-cultural in nature. All of that which will be reviewed here is economic or sociological and, with the exception of two studies of Australian wives, deals with the employment of women in the United States. Most of the economic studies, and many of those from a sociological perspective, used cross-sectional data, as large-scale longitudinal surveys have just recently become available. Some of the cross-sectional analyses used aggregated data and studied, for example, the effect of the fertility rate or industry mix on female labor force participation rates in Standard Metropolitan Statistical Areas (SMSAS). This aggregate level of analysis provides a vital understanding of macro-level labor market and demographic processes over time, but obscures the dynamics of employment among individual females. Studies utilizing individual level data, especially longitudinal analyses, have begun to fill this gap by specifying the factors which lead women from different socioeconomic classes, races, regions and religions to enter paid employment in varying life cycle stages.

Review of the LiteratureFamily Characteristics and Wives' Labor Supply

The earliest studies of women's labor market activity concentrated on the relationships between family characteristics and wives' labor supply. In response to economic models which posited leisure as the only alternative to employment, Mincer (1962, 1968) argued that wives must choose between leisure, paid work, and housework in deciding how much time to commit to labor market activity. In his research, Mincer found an inverse relationship between husband's income, both permanent and transitory, and wife's rate of labor force participation, controlling for wife's wage. His "added worker" hypothesis (i.e., that wives work primarily to supplement husband's income in times of financial need) resulted from Mincer's finding that husband's transitory income was a better predictor of wife's employment than was his permanent income. He also found that the effects of both permanent and transitory income on wife's employment were weaker, the higher husband's education. Based on his finding that the relationship between women's wages and their employment level, controlling for husband's income, was stronger than the effects of husband's incomes on wife's employment, controlling for her wage, Mincer concluded that, overall, the wife's response to her

market wage was stronger than her response to her husband's income.

Subsequent research supports these findings. A later elaboration of Mincer's early work found wives' labor supply was dependent on their current wage, fertility and other family members' incomes and wages (Cain, 1966). Rosenfeld and Perrella (1965) looked at wives who entered the labor force in 1963 or 1964. They found women with low income husbands and those with a child under six years old were most likely to give financial necessity as their main reason for working. In a more general study of marriage and divorce, Carter and Glick (1970) found that the greater husband's income, the less likely were mothers to be employed. However, among couples with no children wife's labor force participation was positively related to husband's income. Sweet's (1970) analysis of the relationship between family composition and wives' employment provided support for the "added worker" hypothesis in that income adequacy (i.e., the ratio of current income/current need) was a significant predictor of wife's employment probability, net of wife's age, education, age of youngest child and number of children. The results of his (Sweet, 1973) study indicated wife's education was positively related to her employment, with education having a greater effect on employment status the lower her husband's income. Oppenheimer



(1970) found that wife's labor force participation depended on her ability to enhance family income. That is, the larger the ratio of wife's to husband's income, the more likely wives were to participate in the labor force. Either a high potential for earnings by wives or low earnings by husbands would increase the likelihood of wives' employment.

Bowen and Finegan's (1969) work is probably the most extensive study of labor force participation. These authors argued that men's participation in the labor force is independent of family economic situation and personal socioeconomic characteristics. Wives' employment was contingent on family need, relatively high market productivity (vis-a-vis her home productivity and/or her husband's market productivity), the availability of viable substitutes for her home labor, and high demand in the female labor market. Their findings were consistent with the "added worker" hypothesis, in that there was a positive association between wives' employment and the unemployment rate of husbands.

Dickinson and Dickinson (1973) questioned the "added worker" hypothesis based on their finding that the relationship between husband's permanent income and wife's employment was the strong negative one. Their results indicated that wives seek employment as a result of long-term economic disadvantage, rather than short-term financial need. Similarly, Sobol (1973), using an index of wife's labor force

attachment over ten years, found that both husband's absolute income and his income relative to those of significant others had a greater effect on wife's employment than did the percent change in husband's income over the survey years. She also found wife's education and husband's education to be positively related to wife's labor force participation and wife's age at marriage to be negatively related to her likelihood of employment.

Smith (1973) modeled both husbands' and wives' labor supply as a function of wife's wage, husband's wage and the presence of children in the home. He found a rise in wife's wage reduced husband's labor force participation, as well as increased husband's earnings reducing wife's employment. In both the male and female models, a rise in one's own wage had a greater effect on one's employment than a similar change in spouse's wage. In addition, he found the presence of children had a negative effect on wives' employment and a positive effect on the employment of husbands. Thus, Lloyd (1975) argues that the presence of children reinforces the traditional division of labor that other economic forces, such as improvements in household technology and the decreasing male/female differential in education, are breaking apart.

Although the labor force participation of males is usually seen as independent of family characteristics, the

economic pressures accompanying the establishment of a family and childrearing may increase the husband's propensity to change jobs and move in search of higher or more stable income. The reciprocal effects of wives' employment and the residential mobility of families was the subject of study by Long (1974). Controlling for occupation, Long found men whose wives were working at the survey date to be less likely to have made a long-distance move and more likely to have moved locally during the preceding year than were men whose wives were not employed. Looking at five-year migration rates, Long found a positive association between wife's employment in 1965 and subsequent five-year local mobility. Wives' continued nonparticipation in the labor force was correlated with low rates of local moving and high rates of interstate mobility. As a result, the author suggests that a working wife's income acts to supplement family income, thus facilitating the upgrading of family housing. Yet there were no significant differences in the rates of interstate migration between 20-24 year old men with working and non-working wives in 1965. Long found that an employed wife decreased the probability of an interstate move only after the husband was 30. In addition, Long found that the greater the distance moved, the less the probability that a wife employed in 1965 would be working in 1970. His research showed that the residential

mobility of families during the formative stages of the husband's career has a significant negative effect on the probability of wife's continued employment.

A study by Duncan and Perrucci (1976) reported similar findings. These authors measured the effects of various aspects of husband's and wife's occupations on the probability of family migration. They found the higher the husband's occupational prestige, the greater the demands to migrate emanating from his occupation and the greater the opportunities for employment in his field elsewhere in the country, the greater the probability of family migration. Family migration was not affected by comparable aspects of the wife's work role. In terms of the impact of migration on the wife's employment, Duncan and Perrucci found that interstate migration facilitates the employment of wives not in the work force prior to the move, but inhibits continued employment among wives who worked preceding migration.

Sandell (1976) used the National Longitudinal Survey data to analyze the effect of migration on the wages of husbands and wives. His results showed that the earnings of husbands increased as a result of migration, while wives' earnings decreased. However, total family income increased, as well, so the positive effect of migration on husband's earnings tended to outweigh its negative effect on wife's earnings.

These studies of the effects of family characteristics on wives' labor supply comprised the earliest reserach on female labor force participation. Mincer pioneered the field by positing a revised model of the time inputs into various activities and formulating the "added worker" hypotheses. His work led to many additional studies of the relationships between wives' employment and the various components of family income. Thereafter, models of female labor force participation were expanded to include such factors as wife's education, the presence of children and residential migration. Yet Mincer's work is still controversial in that subsequent research has yet to determine whether most wives work primarily to supplement husband's incomes.

#### Fertility and Labor Force Participation

Some of the more recent studies of female employment have attempted to clarify the nature and direction of the relationship between fertility and labor force participation. The issue of causality is an important one in this regard. Several authors have argued that the employment/fertility relation is a spurious one, produced by common antecedent variables. Mincer's (1963) assertion to this effect was the first. Terry (1974) argued that controlling for education, religion, SES, residence and age at marriage

may weaken the negative employment/fertility relation or may make it positive, and may result in different findings at varying life cycle stages. Mincer's argument is supported by Terry's (1975) analysis of the 1960 Growth of American Families data, and by Scanzoni's (1975) comprehensive work on sex roles, employment and childbearing. When Terry controlled for a set of factors known to influence both female employment and fertility (e.g., age, Catholicism, education, residence, socioeconomic status and length of marriage), the work/fertility relationship disappeared among blacks. Scanzoni modeled wife's employment and intended family size as a function of role norms, socioeconomic status, education, and fertility timing variables for white non-Catholics, white Catholics and blacks. For all but the Catholic wives, he found that both sex role attitudes and number of children were related to the proportion of a wife's married life spent in the labor force. However, in predicting intended family size among employed women, Scanzoni found sex role attitudes to be the strongest correlates of birth intentions for all three groups. He concludes that sex role modernity may be antecedent to both fertility and employment decisions.<sup>1</sup> Scanzoni found that work motivation was important to fertility patterns, as well, among employed Catholic and black wives. Those who worked for personal satisfaction tended to have fewer children than those who worked out of

necessity. Ryder and Westoff (1971) reported a similar finding; and Dowdall (1974) found the effects of work attitudes on wives' employment to increase with higher income. She also reported that structural factors, such as education, income, and children's ages, were weakly associated with present female employment, as were the structural variables and sex role attitudes. However, the inclusion of sex role attitudes as predictors of female employment status significantly increased the explained variance in this dependent variable.

In addition to those just discussed, at least three studies suggest that the effect of employment on fertility may depend on the woman's work commitment or motivation. Kupinsky (1971) used a work commitment index (the number of years worked during marriage as a percentage of the number of years married) to investigate whether the effect of wife's employment on fertility differs by wife's socioeconomic status. He found that, among wives committed to their work role, high SES wives were more likely to maintain a small family size than lower SES wives. This relationship was strongest among rural women.<sup>2</sup> Kupinsky concluded that future research should assess the proportion of wives' married lives spent in the labor force, by cohort. Hoffman (1974, 1975) suggested that if the negative effect of employment on fertility is not a spurious one, it is

probably a result of the incompatibility of the worker and mother roles since in populations where the extended family facilitates child care, this negative relationship does not exist. Hoffman argued that rewarding employment, rather than employment per se, may be what reduces fertility. Similarly, Birdsall (1976) argued that the effect of work on fertility depends on the woman's attitude toward her work and on her satisfaction with it. When commitment and satisfaction are high, the opportunity cost of children is also high, and fertility will decrease as employment increases. This set of events occurs mainly in urban areas, according to Birdsall. In rural places, female employment does not reduce fertility because the opportunity cost of children is low and the benefit high. In fact, cross-culturally, the fertility of working women in rural areas is higher than the fertility of housewives in urban areas. Birdsall argued further that sociological and economic research on female employment has assumed a congruence of interest between husband and wife concerning the value of children and has thus treated the household as a utility-maximizing unit. She claimed that one result of this perspective has been that few studies have specified wife's earnings as a proportion of husband's earnings. Doing so would tap the potential or actual relative economic contribution of the wife to the household and would facilitate



investigation of the link between fertility and the economic importance of wives' employment.

Subsequent studies have sometimes included such a measure in their models. As described in the second section of this chapter, Oppenheimer (1976) found wife's labor force participation depended on her ability to enhance family status (see p. 12). Weller (1977) found that the greater the ratio of wife's to husband's income, the smaller the completed family size. This negative relationship was greater among persons married less than ten years and among those with twelve or more years of schooling. Weller's results supported the argument for spuriousness, as well, by suggesting that both employment and completed fertility are dependent on education, race and fertility timing variables. His results indicated that: 1) the work/fertility relationship was strongest among wives with a college education and among those who had been married less than ten years; 2) the work/fertility relationship was stronger among whites than among blacks, controlling for other variables; and 3) the relationship between employment status and number of children was strongest among women married less than ten years. Concerning the latter point, Weller suggested wives' employment may be more closely related to the timing and spacing of births than it is to family size. Alternatively, wives married more than ten years at the survey

date may have tended to enter the labor force after child-bearing. Weller argued that if this were the case, the timing of employment would be the critical factor to study.

Waite and Stolzenberg (1976) reported their findings were inconsistent with Mincer's hypothesis of spuriousness. They used the National Longitudinal Survey data to measure the reciprocal effects of fertility plans and employment expectations, and controlled for variables affecting fertility. They found the greater impact to be the effect of labor force participation plans on fertility expectations.

Smith-Lovin and Tickamyer (1978) criticized Waite and Stolzenberg's use of fertility and employment expectations as misleading and, instead, used actual fertility and labor force behavior. They found that the number of years a woman had been employed since her marriage was best predicted by her education, her pre-marital work experience and current fertility, spouse's income, and marital duration. The number of children she bore, on the other hand, depended on her religious preference in high school and marital duration. Labor market activity had no significant net effect on actual fertility in these data.

A recent paper (Cramer, 1980) examined the contradictory results reported in the Waite and Stolzenberg (1976) and Smith-Lovin and Tickamyer (1978) studies. Cramer argued that methodological problems plague both analyses. Although

each set of findings can be supported by the literature, Cramer pointed out that both studies show the presence of serious multicollinearity problems. These problems lead to unreliable estimates of the reciprocal effects of wives' employment and fertility. Using sensitivity analysis to detect such instability, Cramer estimated models analagous to those in both studies and found support only for Waite and Stolzenberg's conclusions (i.e., that employment plans reduce expected family size). He found no conclusive evidence either to support Smith-Lovin and Tickamyer's conclusion that completed fertility strongly affects cumulative employment or to suggest reciprocal causation. According to Cramer, misspecification is another major problem with the Smith-Lovin and Tickamyer model, in that there was no temporal relationship specified between the cumulative employment and fertility variables. Cramer estimated dynamic models of both cumulative and expected employment and fertility. Using the former (cumulative) model, he found wife's initial (i.e., prebirth) employment significantly depressed fertility, although the coefficient was small. However, having a baby substantially reduced wife's subsequent employment. Thus, Cramer argued that although wife's cumulative employment and fertility do affect each other, the effect of fertility on employment is the greater one. After estimating the latter (expectations) model he concluded

that employment plans depend primarily on recent employment, while fertility expectations are best predicted by recent fertility. Neither type of behavior (i.e., employment or fertility) had much effect on either kind of expectation.

Several other researchers have examined the relationships between aspects of female employment and fertility without dealing extensively with the issue of causality. Preston and Richards (1975) modeled marriage rates in SMSAS as a function of a set of labor demand variables. Controlling for male earnings, population of the SMSA, the proportion Catholic, the proportion of college educated females, and the racial composition and sex ratio of the SMSA, they found the more female the industry mix and the higher female wage rates, the lower the proportion of married females. Both percent Catholic and population of the SMSA were negatively related to the proportion marriage, while the sex ratio exerted a positive influence. These results were not due to the migration of unmarried women to high demand cities, as a migration ratio was included in the model to control for this event. Because the effects of the labor market variables were stronger than those of the marriage market factors, the authors concluded the job opportunities effect on marriage rates dominated the marriage opportunities effect. Santos (1975) also found that, despite the rise in

real family income over time, the rise in female market potential was a significant factor in the decline in female marriage rates. Women are less likely to marry if they reside in an area of relatively high employment opportunity.

Waite and Spitze (1978), Ross (1974), and Bowers and Hastings (1970) all studied the relationships between employment or taste for work, and fertility timing variables. Waite and Spitze focused on factors affecting the probability of marriage and first birth at a given age for females. Variables which indicated a preference for future employment (e.g., taste for market work, school enrollment and mother's education) tended to increase ages at marriage and first birth among the women in their data. Current employment acted to delay marriage and first birth, as well. Ross focused on the timing and spacing of births and wives' labor force participation. She found that women with higher education had an earlier first birth than did other women, and spaced their births more closely. A negative relationship was found between education and number of children, as well. Women with more education had higher labor force participation rates in all birth intervals; and the higher their husband's income and education, the lower the wife's rate of employment. Finally, among wives who worked after having children, those with higher husband's income, more children and wider birth spacing were more likely to begin

paid employment during their childbearing years. Bowers and Hastings looked at fertility timing differences by wife's employment status among college graduates in Utah. They found working wives' families were smaller and more closely spaced than families of non-working wives. However, non-working wives had had a shorter marriage/first birth interval than working wives. Wives who worked during childbearing generally had the most widely spaced births. Wives who worked before, or before and after, childbearing spaced their births closer than wives who worked during childbearing, but wider than wives who worked only after childbearing was completed.

Two studies focused on the intensity of female employment. Kusiman and Scheffler(1975) analyzed data on married men and women and found a sex difference in the effect of number of children on work time. The addition of children tended to increase male work time; while for women, an increase in the number of children was related to a decrease in time worked. Their finding parallels that by Smith (1973) concerning the presence of children and husbands' and wives' labor supply (see p. 13). In addition, Kushman and Scheffler found a positive association between the quantity of labor supplied by husbands and wives, controlling for number of children. The authors speculate that increased work time on the part of males allows women to work more without upsetting the balance of family power by changing

their relative contributions to family income. Another explanation may be that an increase in financial need caused increased employment on the part of both spouses. Gramm (1975) also analyzed data on the intensity of labor force participation (i.e., worked full-time, part-time, or not at all in 1969), among a sample of married teachers. Although husband's wage had a negative effect on time worked by wives in these data, the most important factors were presence of the first child and the age of that child. Return to paid employment was quicker after births subsequent to the first and as the first child got older.

Two other studies indicate the persisting influence of fertility behavior on wives' employment. Groat, Workman and Neal (1976) studied several factors related to the extent of labor force participation among a sample of working mothers. They found the longer the marriage/first birth interval of these wives, the longer their work duration and the greater their occupational status. Among Protestants, a long marriage/first birth interval and high occupational status were related to having fewer children; while among Catholics, these factors were associated with greater completed fertility. Finally, premarital work experience was associated with a longer marriage/first birth interval and also with continued employment after marriage. Sweet (1970) found that the probability of being in the labor force for women

aged 50-54 with no children present was negatively related to the number of children ever born. This analysis suggests that the amount of time spent in childbearing has a long-lasting effect on female labor force participation.

Analyses of wives' employment and aspects of their fertility probably comprise the largest segment of the literature on female labor force participation. Although the issue of causality in the work/fertility relationship has been intensely debated, it has yet to be resolved. Most research either models one variable as a function of the other or measures their reciprocal effects. The findings of these studies are contradictory and a convincing refutation of Mincer's hypothesis of spuriousness has yet to appear.<sup>3</sup> Research has shown that the employment/fertility relation varies by race, education, religion, marital duration and the motivation to work. We have also found that employment opportunities affect marriage rates and that the timing of marriage and the timing and spacing of births are all partially dependent on wife's education. The timing of first birth and the spacing of births have been linked to employment during various life cycle intervals, as well; and sex differences have been found in the effect of children on work time.



Rural/Urban Differences and Labor Market Variables

Other studies have explored rural/urban differences in wives' labor force participation, or have focused on the effects of labor market variables on female employment. Sweet (1972a) compared the differential effects of education on the labor force participation of rural and urban wives. He found the greatest employment difference among rural and urban wives with low levels of education. Farm wives were less likely to be employed. However, at higher levels of education, rural wives were more likely to be employed than urban wives. Sweet speculated that labor demand factors may be important in that employment opportunities may be greater for college graduates in rural areas than they are for college graduates in urban areas. He also argued that having a low education hinders employment more in rural areas than it does in cities where lower-skill jobs are more numerous.

Sweet's research is not the only work to point out the relevance of demand factors to wives' employment rate. Blau (1972) argued that female labor supply is highly responsive to changes in both employment opportunities and the wage rate. Bowen and Finegan's (1969) work included a chapter on labor market conditions. Controlling for husbands' income, other family income, education, percentage non-white, percentage of wives with a preschool child, and net migration

between 1955 and 1960, they found that all the labor market variables' effects on wives' employment were significant. The rate of female employment was greater, the lower the unemployment rate, the more female the industry mix, the lower the wages of domestics and the greater the female wage rate.

A more recent study compared the effects of supply and demand factors on the employment of rural and urban women. Chenoweth and Maret-Havens (1978) reported that, overall, rural women were much less likely to be employed than were urban women. Of those employed, rural women were the least likely of any to have a permanent career attachment to the labor force. On the other hand, these authors found no rural/urban difference in the effect of education on employment, although urban women were more likely to have additional job-related training beyond their formal education. The remaining supply factors tested included marital status, husband's income, number of children and sex role attitudes. In general there were no significant rural/urban differences in the effects of the supply factors on female employment. However, a different picture emerged for the demand factors. Chenoweth and Maret-Havens found the industry mix in the urban places provided more job opportunities for women. The least favorable industry mix was found in rural areas located outside SMSAS. Employed

urban women were also more likely to receive higher wages than their rural counterparts. Rural women spent less time in the labor market than urban women due to their relative disadvantage in terms of both employment opportunities and wages.<sup>4</sup>

Studies of labor market variables and rural/urban employment differences have led to a similar conclusion. That is, demand factors (e.g., wages and industry mix) are at least as important as supply factors (e.g., fertility and human capital variables) in predicting wives' employment. The greater the availability of jobs and the higher their pay, the more likely is employment among all types of women.

#### Relationships Among Other Factors

Numerous studies deal with the relationships among factors usually associated with female employment. Some of these look at the determinants of age at marriage or educational attainment, while others study the factors related to aggregate fertility rates or various components of individual fertility.

Voss (1975) studied the social determinants of age at first marriage; Marini (1978) compared the effect of age at marriage on the educational attainment of males and females; and Waite and Moore (1978) analyzed the effect of

age at first birth on the educational attainment of black and white females. Both Voss and Marini found a strong positive association between age at marriage and educational attainment among females. In Voss' data, the effect of age at marriage on years of schooling was a moderate, positive one for males. Using follow-up data on 1969 high school students, Marini found that age at marriage had no significant effect on educational attainment among males.<sup>5</sup> Based on their analysis of the National Longitudinal Survey data on women aged 14-24, Waite and Moore asserted there was a direct relationship, however, between age at birth of first child and female educational attainment, the effect being twice as great among whites as among blacks.

Age at marriage was related to length of marriage/first birth interval in a study by Ruzicka (1976), and to spacing of births by Bumpass and Westoff (1970). Among a sample of Australian wives, Ruzicka found the earlier the age at first marriage, the shorter the marriage/first birth interval. Bumpass and Westoff found that as age at marriage increased, children tended to be more closely spaced. This association grew stronger, the greater the number of children. Among women who married early, those with large families spaced their births wider than those with fewer children. Among women who married late, those with large families spaced their births closer than those with fewer

children. They also found that spacing was negatively related to number of children, net of marital age, and that wife's education was negatively related to spacing of births. They suggest that highly educated wives may space births more closely than wives with less education partly because the former tend to marry at a later age.

In an earlier work, Bumpass' (1969) attempted to specify the role of age at marriage in the differential relationship between socioeconomic status and fertility among Catholic and non-Catholic couples. That is, Catholic couples usually display higher fertility with increased socioeconomic status, while non-Catholic couples tend to show reduced fertility, the greater their socioeconomic status. Bumpass found age at marriage to have an important interaction effect. When wife's age at marriage was less than 19, the association between fertility and socioeconomic status was strong and negative. As wife's age at marriage increased, the strength of this negative relationship decreased and became positive when wife's age at marriage was greater than 23. Thus, the analysis suggested that the original relationship was due to the over-representation of Catholics among late-marriers.<sup>6</sup> In addition, Bumpass found that, among wives who married early, the greater their educational attainment, the lower their fertility. However, among wives who postponed marriage,

higher fertility was more likely for women with higher levels of education. This interaction of age at marriage, education and fertility was found among both the rural and urban, Catholic and non-Catholic wives in his data.

The effect of economic variables on aggregate fertility rates or on individual family size was the subject of several further analyses. Cain and Weininger (1973) used cross-sectional aggregate data to study the economic determinants of fertility rates in SMSAS. They found fertility rates were higher, the higher male wages and the lower female wages. Gardner (1973) was concerned with predicting changes in individual family size. Factors which acted to reduce completed fertility included increases in both wife's and husband's wages and educations. The negative effect of husband's education was significantly greater in families where the wife was not employed. Two papers by Simon (1975a, 1975b) dealt with the effects of income and education on the probability of successive births. In the first, he found that an increase in family income was associated with a greater probability of subsequent births among families with one child. However, among families with several children, an increase in family income decreased the probability of future births. His second paper is basically an extension of the original model to include various interaction effects. There, he found the

positive effect of additional income on successive births to be stronger for more highly educated women than it was among wives with fewer years of schooling. In addition, the positive effect of an income increase on successive births was weaker among blacks than it was for whites.

Presser (1971) argued that most fertility research has studied racial differences in completed fertility and ignored the role of timing of first birth. Analysis of the 1960 Census data has indicated the median age at first birth was two years younger for black women than it was for white women (22.2 years vs. 20.1 years). She found that black women have shorter birth intervals, more timing failures, more premarital births, earlier premarital births, a lower probability of marriage following a premarital birth, and a greater probability of labor force participation after first birth. Presser argued many of these factors may largely explain racial differences in completed fertility.

By examining the interrelationships among factors usually predictive of female labor force participation, the above studies allow one to better understand how several variables may jointly induce wives' employment patterns. For example, women who marry early tend to be low on education and to have an early first birth. They also tend to space their births widely. One would expect all of these

factors to inhibit employment, at least through the child-bearing years. Additionally, the effect of husband's income on wife's employment may vary according to family size. In families with one child, a rise in husband's income increases the probability of a subsequent birth and probably decreases wife's employment as a result. Among larger families, husband's income is negatively related to the probability of future births and may have a lesser, or different, effect on wife's employment.

### Family Life Cycle

Another theme in the labor force literature stresses the importance of family life cycle stage as an explanatory variable. Becker (1965) took a somewhat novel approach, focusing on husband/wife time inputs into home and market activities. He argued that as factors (e.g., husband's wage, wife's wage, number of preschool children, etc.) influencing the spouses' relative productivities change, wives alter the proportions of time they devote to work at home and to labor market activity. Oppenheimer (1974) found that families may experience money shortages as the demand exerted on family resources changes over the life cycle. This "life cycle squeeze" usually occurs when children are in their teens and is especially severe when the father is in a blue collar occupation, in which income



peaks relatively early. Gove et al (1973) argued that families meet the "life cycle squeeze" situation in patterned ways. In working class families, characterized by a low income profile, an early income ceiling, a large number of children and early timing of first birth, the wife is likely to be in the labor force; children may be working; the husband may work overtime; and relatives may live with the family. In middle class families, characterized by a late income ceiling, high education, later marriage and a delayed first birth, the wife may work from marriage to first birth. Gove's work seems to imply either that no life cycle squeeze occurs in middle class families or that it occurs earlier in that group. The marriage/first birth period is one of relative financial strain due to expenses which must be incurred to establish a home and the low earnings of husbands relative to their permanent incomes.

Several studies suggest that life cycle stage interacts statistically with other independent variables. Terry (1975) addressed rival explanations in the work/fertility relationship by testing the common influences of other factors. In general, she found the effects of these other variables (e.g., education, socioeconomic status and residence) on the work/fertility relationship differed across life cycle stages. For example, among white wives, number of children was positively related to working only during

the childbearing years. Leibowitz (1975) demonstrated the importance of life cycle stage when she found that the employment status of women in the childbearing and childrearing stages was independent of their educational level. The education/employment relationship disappeared in these stages because the time input into child care increased with the years of schooling of the mother. Similarly, both Becker (1965) and Gronau (1973a) found that young children increased the value of (home) time more for highly educated women than for those having lower levels of education. Mott (1972) assessed the effects of education and life cycle stage on the employment of two cohorts of women in Rhode Island. At all levels of education, he found higher rates of premarital labor force participation among women reaching marriage age by World War Two. Among this older cohort, the lower a woman's education, the less likely she was to have been employed between marriage and first birth. Among the cohort reaching marriage age after World War Two, the greater a woman's education, the more likely she was to have been employed during this life cycle stage. The younger cohort was more likely to have worked during the childbearing stage, while the older cohort was more likely never to have worked. Finally, Mott found that employment in one life cycle stage was a good predictor of employment in later stages, for both cohorts. The later

the life cycle stage, the stronger the association between work in that stage and in subsequent intervals. Blau (1976) reported a similar finding concerning the predictive power of work in one stage for work in the next. In two papers (1976, 1980), Waite modeled the probability of a wife's working during each of several life cycle stages as a function of a set of independent variables. In the earlier paper, these were length of the interval, age during the interval, Catholicism, demand for female labor during the interval, wife's wage potential, husband's income, and contraceptive use in the interval. In her later work, the variables included wife's wage, her education, the demand for female labor, size of the labor market, and unemployment rate of her area of residence, age of the youngest child, the proportion of weeks since leaving school that the wife worked, her age and age at marriage, number of children, husband's health, race, southern background, and husband's and wife's attitudes regarding female employment. In general, she found the effects of the independent variables on labor force participation differed across the various life cycle stages. In the earlier study, for example, the positive effect of wife's wage on her employment was greatest in the period before her first birth, declining steadily afterward. That research was based on a national sample of married women, 18 to 44 years old in 1960. In

her later research, based on a different cohort of women (aged 14 to 24 in 1967), wife's wage potential had a strong positive effect on employment in all stages of the life cycle. On the other hand, education had a greater effect on the probability of labor force participation before intended childbearing was completed. Additionally, Waite found the timing of early life cycle events, such as marriage, to be strongly related to later labor market activity. Taken together, the overall effects of the independent variables (education, husband's income, etc.) acted to push women into the labor force during certain stages and to encourage them to withdraw during others. Viewed over individuals' lifetimes, the result would be patterns of employment and withdrawal from the labor force. Yet few studies conceptualize female employment as lifetime patterns.

Although we know the labor force participation of married women is typically discontinuous and is related to life cycle events, until recently, research has had to rely on cross-sectional data and has tended to define and measure labor market activity as employment at a particular time rather than as a process over the life cycle. The recent availability of longitudinal data has facilitated investigation of both the discontinuity of female employment and the various forms this discontinuity takes among married women.

### Discontinuity of Female Labor Force Participation

One study tapped the discontinuity of female labor force participation by cumulating spells of employment and attempting to predict the frequency of labor market withdrawal and reentry. Hill (1977) found the frequency increased with number of children, number of years the husband was unemployed and frequency of geographical mobility.

Two studies tapped the discontinuity of female employment by measuring labor force participation as the proportion of time employed during specific life cycle intervals (Cogan and Berger, 1978; Polachek, 1975). Cogan and Berger were concerned with the impact of the timing, spacing and number of children on a married woman's accumulated work experience and wage growth over the life cycle. They found that both the number of children a woman had and the length of her birth intervals were negatively related to years of work experience. In addition, Cogan and Berger found significant interaction between number and spacing of children such that the greater the number of children, the greater the negative effect of wide spacing on lifetime work experience. Age at first birth had no significant net effect on accumulated work experience in their data. In terms of wage rates, Cogan and Berger found a

direct positive effect for accumulated work experience and an indirect effect for childrearing through its effect on years worked. Polachek was concerned with the way in which varying degrees of life cycle labor force participation affect female wage rates and contribute to an explanation of male/female wage differentials. His findings indicate that a significant proportion of the male/female wage differential could be explained by male/female variation in employment continuity. That is, women's wages are generally lower than men's partially as a result of their less continuous patterns of labor force participation. Although they did not look at employment by life cycle stage, Suter and Miller (1973) report similar findings. They were able to account for approximately two-thirds of the variance in the male/female income differential using occupation, age and work experience. Jusenius' (1976) research further specified the employment continuity/wage relationship found by Polachek and by Suter and Miller. She found that the effect of work experience on wages varied by the skill level of the job. Controlling for job tenure, one-third of the typically female occupations monetarily rewarded only the most recent work experience.

#### Patterns of Employment

Although the discontinuity of female employment is an important factor, it represents only one aspect of a

complex phenomenon. Another aspect involves the forms this discontinuity takes among women. Employment patterns are both role management strategies and indicators of the need for added income over the life cycle. Sweet (1972b) discussed several strategies in combining the worker and mother roles. He argued that the typical means is to work from marriage to first birth, to remain at home during the childbearing years, and to return to paid employment when the children are school-aged. Other strategies suggested by Sweet include part-time work, continuous employment (either career-related or economically necessitated), sporadic withdrawal and reentry, and permanent labor force withdrawal when the first child is born. Of course, another strategy is to forego the worker role and be permanently out of the labor force. In his analysis, Sweet found that women with less than twelve years of schooling were more likely to have followed the latter pattern than were women with higher educations. He also found college educated women to be more likely than wives with less education to return to paid employment soon after childbirth. Among mothers of young children in general, the rate of return to the labor force was U-shaped, with wives having high and low educations exhibiting the greatest return rates. Sweet speculated that the occupations held by poorly educated wives may be easier to reenter than those of wives with intermediate levels of education and that inexpensive child

care may be more readily accessible for these women. One may add that poorly educated wives are likely to be forced by financial circumstances to return to work soon after childbirth, as well. Sweet concluded by stressing the need for a longitudinal study of wives' employment patterns and their differential use by various population subgroups.

To date, two studies have identified various life-time employment patterns among married women (Elder and Rockwell, 1967; Young, 1978). Elder and Rockwell conceptualized employment patterns as presence in the labor force during the various family life cycle stages. They divided their sample of mothers into three main categories and looked at the relationship between worklife pattern and marital timing. They identified four employment patterns in a 1925-29 birth cohort: conventional, double-track, interrupted and unstable. One-third of the women either never worked at all or worked only until their first birth ("conventional"). One-fourth worked prior to having their first child and returned to paid employment at a later stage ("interrupted"). Thirty percent reentered the work force after each birth ("double-track"). The final category, "unstable," referred to the twelve percent of women with fluctuating employment. Elder and Rockwell's data indicated a link between economic disadvantage, early marriage, and the double-track employment pattern.<sup>7</sup> Women who married



early were typically from a lower socioeconomic background, lived apart from their parents as teenagers, had a greater than average number of siblings, and were Southern or rural in origin. In this birth cohort, women who worked continuously throughout their lifetimes did so mainly out of necessity.

In a more recent study, Young (1978) identified the main employment patterns during the first three life cycle stages in a cross-sectional sample of Australian wives, and then assessed the influence of several independent variables on the choice of work pattern. The women she surveyed were asked whether they worked outside the home between marriage and first birth (yes/no), while the children were still too young for school (yes/no), and after the children were in school (yes/no). These women were generally found to be concentrated in five of the eight possible employment patterns. Thirty-five percent of the wives did not work at all during these first three life cycle stages (NNN); twenty-four percent worked only between marriage and first birth (YNN); eleven percent began working when their children were in school (NNY); eleven percent worked except when their children were preschoolers (YNY); and ten percent worked continuously (YYY). Within these patterns, Young further differentiated the women according to whether they worked full-time or part-time during each life cycle stage.

Again, a limited range of work patterns was found. Women following the YNY pattern worked either full-time during both working stages or full-time in the first stage and part-time in the third. Those who worked continuously (YYY) were either consistently full-time workers or worked full-time during stage one and part-time thereafter. The majority of women working only during the first stage (YNN) were full-time workers, while most of those who began working only after their children were in school (NNY) worked part-time. The independent variables Young considered included wife's education, year of marriage, and timing of first birth. In terms of education, Young found that women having greater years of schooling (high school degree or higher education) were most likely to work during all three stages (YYY), to work continuously except when preschool children were present (YNY), or to work only before first birth (YNN). On the other hand, women low on education were most often found to be never-employed (NNN) or to begin working only after all children were in school (NNY). In terms of year of marriage (which is roughly analagous to cohort), wives married in the 1930's tended to remain at home until their children were in school. Women who married in the 1940's, were most likely to work in the YNY pattern; while those who married since 1950 were increasingly found to have worked continuously since marriage.

In terms of the timing of first birth, there was evidence in this Australian data to indicate that women with a short marriage/first birth interval tended not to work during that interval.

### Summary

The present research builds on the implications of past analyses of female labor force participation. An early line of research demonstrated that family characteristics are closely related to wives' labor supply. Some of the more recent research on wives' employment has attempted to clarify the nature and direction of the work/fertility relationship. Rural/urban differences have been found in the effects of supply and demand factors on female employment; and numerous studies have focused on the relationships among variables usually predictive of female employment. Another line of research has demonstrated that the effects of socioeconomic factors on wives' employment vary from one life cycle stage to the next. Thus, an individual with a particular configuration of characteristics would be more likely to be employed during some stages and less likely during others. Recent research has shown that the discontinuity of female employment is an important aspect of labor market dynamics. Yet the discontinuity itself is patterned.

Among one cohort of American women, four patterns of labor force participation and withdrawal have been tentatively linked to other variables. Yet Elder and Rockwell's typology of worklife patterns was secondary to their main concern with analyzing the factors related to marital timing. Because they classified wives using only four employment patterns, their typology loses much valuable information regarding wives' employment. Young's classification system, on the other hand, was a comprehensive one. She identified the main employment patterns among a sample of Australian wives and did a limited analysis of the factors related to the probability of being employed in a certain patterns.

Although past research has identified and analyzed several employment patterns, a comprehensive study of the employment patterns of women in the United States was yet to be done. Much cross-sectional research has been done on wives' employment, but we still do not know why some wives are never employed while most work for pay at some point in the family life cycle. Although it is clear that most wives are discontinuously employed and that discontinuous employment is related to low wages, we have not discovered the factors that distinguish continuously employed wives from discontinuously employed wives. Finally, little is known about the timing of employment among married women.

Research Objectives

The objectives of the present research are: 1) to describe the employment timing patterns of married women, and 2) to indicate the family characteristics associated with these patterns. The first objective is met by identifying the various employment patterns emergent from the work histories of two cohorts of American wives. The second goal is met by identifying socioeconomic and fertility factors related to employment, to discontinuous employment, and to employment in each of the three early life cycle stages. These endeavors will add to our knowledge of wives' employment because they will provide a better understanding of the association between family characteristics and the synchronization of events in women's lives.

Notes to Chapter II

<sup>1</sup>It should be noted, however, that although Scanzoni's results supported this hypothesis, his data were cross-sectional in nature, and thus, did not capture the dynamic, processual nature of employment/fertility decisions.

<sup>2</sup>Kupinsky's finding suggests that employment (work commitment) has a greater effect on family size among high SES wives. However, it may be that family size has a greater effect on work commitment among the high SES group. That is, the causal sequence may be confused in this study.

<sup>3</sup>Waite and Stolzenberg (1976) tested Mincer's hypothesis by including race, education, marital status and husband's income in their model. However, they failed to include variables such as ethnicity, religion, sex role attitudes and mother's employment; all of which can be prior to, and possibly causal for both wives' employment and fertility.

<sup>4</sup>This analysis did not include an interaction term to test Sweet's hypothesis that the effect of education on job opportunities differs in rural and urban areas.

<sup>5</sup>However, an early marriage is not inconsequential for males. Hogan (1980) found men who experience a disorderly transition to adulthood (i.e., marriage occurred before school completion and/or before beginning the first job) also experience lower earnings returns to their education and substantially lower total earnings.

<sup>6</sup>Other studies that found Catholics are late-marriers include Elder and Rockwell (1967) and Ryder and Westoff (1971).

<sup>7</sup>Another study which shows a link between early marriage and later economic disadvantage is one by Coombs and Freedman (1970).

## CHAPTER III EMPLOYMENT PATTERNS

### Introduction

Married women with children are often faced with the difficult task of assuming multiple roles. The wife role usually includes major responsibility for housecleaning, shopping, laundry, and cooking; while the mother role involves childbearing, medical care, transportation, babysitting, counseling and attendance at various group meetings. Many married women take on the worker role, as well, either for the financial and personal rewards of a career or to provide a necessary supplement to family income. The simultaneous assumption of the wife, mother and worker roles is a difficult task at best. Given no marital disruption, the wife and mother roles are relatively fixed once the first child is born. Employment is the only manipulable role and is usually timed to balance family need with the wife's desire to work.

Most families face a period of financial strain at least once over the life cycle. Between marriage and first birth, many couples are confronted with the expense of establishing their own home. Major purchases during this period often include a house, furniture and appliances. For most

families, income is low during the first interval. If the individuals are young, their earnings are even more likely to be low, regardless of their occupations. Once childbearing begins, wives are generally less likely to be employed. However this second period may be one of financial strain, if the husband's income is insufficient and/or if fertility is high. Another "life cycle squeeze" often occurs as the children get older and make increased demands on the family's resources. Among blue-collar workers, the third stage can be particularly difficult, since income peaks earlier than family demand in those occupations. Among higher-income families, the third stage can also be a difficult one as older children drain resources through college-related expenses.

Families employ various strategies to meet their needs over the life cycle. Some go heavily into debt; while others cut back on expenditures for clothing, entertainment or vacations, or forfeit savings or a college education for their children. One strategy utilized by a majority of families, at some point in the life cycle, is for the wife to seek employment.

#### Patterns of Employment

Wives' employment is discontinuous in that they usually enter and leave the work force several times over the life cycle. These intervals of employment and



nonemployment form lifetime employment patterns. A few such patterns have been identified among wives in the United States (Elder and Rockwell, 1967), while a fairly extensive classification of Australian wives' employment patterns has been compiled (Young, 1978). One of the purposes of the present research was to create an exhaustive typology of the employment patterns of married women in the United States.

The employment of married women may be patterned in several ways. In each of the three early life cycle stages, wives may be employed either continuously or sporadically, or they may remain at home. These three options, at each stage, result in the twenty-seven possible employment patterns shown in Figure 3-1. Some of these strategies for combining home and market work are probably more frequently used than others, while some probably represent empty cells.

Current knowledge of female employment suggests that eight patterns may be popular ones. 1) While most women are employed between marriage and first birth, many never return to paid employment after their first child is born (COO). This pattern will be called "traditional" (TRADITNL). 2) Others who are employed during this first life cycle stage choose to remain at home during their childbearing years and return to the work force when their children are old enough to be cared for by others or to attend school (COC).

This second pattern is an interrupted one (INTERUP).

3) Some wives work continuously throughout their adult lives, taking time off only for childbirths (CCC). Continuous lifetime employment will be labeled "double-track" (DOUBLTRK). 4) Others are employed sporadically entering and leaving the work force during every life cycle state (SSS). This is an in-and-out pattern (INANDOUT). 5) Some women do not work outside of the home between marriage and first birth, and a portion of these women are never employed (OOO/NEVEREMP). 6) Of those who later enter the work force, some commence paid employment after their first child is born and proceed to work on a continuous basis (OCC). These workers will be labeled "double-track after first birth" (DTRKAB1). 7) Another group enters the work force following their first birth and works sporadically thereafter (OSS). This is an in-and-out pattern after first birth (INOUTAB1). 8) Other women delay entry until their children are near school age (OOC), often beginning paid employment in midlife (MIDLIFE). These eight patterns are labeled in Figure 3-1.

The two existing studies of wives' employment patterns have investigated the relationships between family socioeconomic characteristics and separate worklife patterns (Elder and Rockwell, 1967; Young, 1978). That research has facilitated preliminary understanding of the association between family characteristics and the employment timing

pattern utilized to balance home and market work. Yet many of the patterns are closely related; and we need to further specify the factors related to the probability that a woman's worklife follows one pattern instead of another.

### Employment Pattern Contrasts

Three issues are important in studying wives' employment. First and most basic is the question of why some wives are never-employed, while most work for pay at some point in the family life cycle. The second issue involves the discontinuity of most female employment. That is, what are the factors inducing or facilitating the continuous employment of a fraction of wives and the discontinuous employment of the majority? The third question involves the factors related to employment before, during, and after childbearing. Each of these issues can be addressed by studying the effects of a set of independent variables on contrasts of related employment patterns.<sup>1</sup>

### Never-Employed versus Ever-Employed Wives

Assessing the effects of a set of family characteristics on a contrast of all ever-employed wives with the never-employed group addresses the most general question of why some women are never employed outside of the home, while

most work for pay at some point in the family life cycle. Most research dealing with the factors related to working or not working has used cross-sectional data on wives' employment status at the survey date. Factors positively related to wife's employment in those studies include wife's education, premarital work experience and wage potential, market demand for female labor, husband's education and his rate of unemployment, length of the marriage/first birth interval and sex role modernity. Factors negatively related to wife's employment in cross-sectional research include husband's income and education, family income adequacy, wife's fertility and the spacing of births, frequency of long-distance migration and rural residence. However, the use of survey week employment status as a measure of lifetime employment improperly assumes that a woman's labor force activity in one week adequately portrays her work pattern over time. Wives who are employed at the survey date may have been out of the work force during an earlier life cycle stage and/or may withdraw for an interval in the future. Research that has focused on lifetime employment has found that older cohorts and wives with less than twelve years of schooling were most likely never to have been employed (Sweet, 1972a; Young, 1978).

### Continuous versus Discontinuous Workers

Contrasting the effects of family characteristics on continuous lifetime workers and sporadic lifetime workers should indicate some of the inducements and facilitators of permanent work force attachment. Wives who are employed in every life cycle stage can be divided into two groups. One group works every year from marriage through child-bearing, as well as after all their children are in school (DOUBLTRK). These women leave their jobs only long enough to give birth and recover. The employment of the second group also spans the three life cycle stages, but these wives are not employed year after year. Instead, they are employed sporadically, working one or several years on and one or several years off (INANDOUT). The work force entry and withdrawal of the sporadically employed is not tied in any obvious way to their life cycle stage, but may be, instead, a response to periodic increases in the family's need for income. As such, their employment may be less due to career aspirations or work commitment than is the employment of continuous workers. Wives who are employed sporadically in all three life cycle stages may differ from continuously employed wives in terms of their frequency of geographical mobility, as well. Previous research has indicated that family migration significantly decreases the probability of wives' continued employment (Long, 1974).

### Employment Over the Life Cycle

Ever-employed wives time their employment in different ways. Both of the patterns involved in the previous contrast were characterized by at least some employment in every life cycle stage. Yet many wives are not employed in every stage. Some are not employed between marriage and first birth, while many remain at home during the second (childbearing) stage. Wives employed before, but not during childbearing may reenter paid employment after childbearing or may remain at home permanently. Wives who have never been employed may enter the work force for the first time in mid-life.

The present analysis uses employment pattern contrasts to investigate the factors related to employment before, during, and after childbearing.<sup>2</sup> In general, wives who work are most likely to be employed during the first life cycle stage, when role conflict and husband's income are relatively low. Yet not all ever-employed wives begin the family life cycle in the work force. The only study with specific findings relevant to first stage employment is one by Young (1978). She found that women who had a short interval between marriage and first birth were not likely to be employed during that stage, but tended to enter the work force at a later date. To further investigate the factors related to employment before childbearing, one can construct

a contrast of employment patterns which differ only in regards to first stage employment. That is, wives employed continuously since marriage can be contrasted with wives employed only since first birth.

Previous research has linked work during childbearing to both high and low wife's education, wide birth spacing, greater family size, and younger cohorts (Bowers and Hastings, 1970; Mott, 1972; Terry, 1975; Young, 1978). Although some studies indicate wife's education is independent of employment during the childbearing years (Leibowitz, 1975; Young, 1978), others have linked employment during this stage to both very high and low education (Sweet, 1972a; Waite, 1980). To further investigate the factors related to employment during childbearing, one can construct a contrast of employment patterns which differ only in regards to second stage employment. That is, wives who worked before and after but not during childbearing can be contrasted with wives who worked continuously in every stage.

Third stage employment may represent a return to the work force or an initial entry. Two contrasts are needed to study employment after childbearing, because the factors related to the work force reentry of previously employed wives may differ from the factors related to initial employment in mid-life. The literature provides little information on either type of third stage employment. Cogan and Berger

(1978) found both length of birth spacing and number of children to be negatively related to years of work experience. They also found significant interaction between the two variables, such that the effect of number of children on years worked was greater, the wider the spacing of those births.<sup>3</sup> Since wives who enter or reenter the work force after childbearing presumably have more work experience than wives who do not, the above findings would lead one to expect closer birth spacing and fewer children among wives who worked in stage three. To further investigate the factors related to employment after childbearing, one can construct contrasts of employment patterns which differ only in regards to employment in stage three. To address work force reentry, wives employed only before childbearing can be contrasted with wives employed before and after childbearing. To study initial employment in mid-life, never-employed wives can be contrasted with wives who entered the work force for the first time in stage three.



Life Cycle Stage

	<u>First</u>	<u>Second</u>	<u>Third</u>	<u>Pattern</u>	<u>Name</u>
	O	O	O	OOO	NEVEREMP
	O	O	S	OOS	
	O	S	O	OSO	
	O	S	S	OSS	INOUTAB1
	O	O	C	OOC	MIDLIFE
	O	C	O	OCO	
	O	C	C	OCC	DTRKAB1
	O	S	C	OSC	
	O	C	S	OCS	
	S	S	S	SSS	INANDOUT
	S	S	O	SSO	
	S	O	S	SOS	
Employment	S	O	O	SOO	
	S	O	C	SOC	
	S	C	O	SCO	
	S	S	C	SSC	
	S	C	S	SCS	
	S	C	C	SCC	
	C	C	C	CCC	DOUBLTRK
	C	C	O	CCO	
	C	O	C	COC	INTERUP
	C	O	O	COO	TRADITNL
	C	O	S	COS	
	C	S	O	CSO	
	C	C	S	CCS	
	C	S	C	CSC	
	C	S	S	CSS	

Figure 3-1. Possible Employment Patterns  
(O = out, S = sporadic, C = continuous)

Notes to Chapter III

<sup>1</sup>The contrasts chosen here are not the only ones that could have been used to address the three issues, but they were the ones most directly relevant to the issues.

<sup>2</sup>In this study, childbearing is assumed to be over when the youngest child has reached his/her third birthday (see Chapter IV for further discussion and justification of this definition).

<sup>3</sup>Causality, in this relationship, probably goes in both directions. That is, some wives willingly withdraw from the work force at first birth because they desire a large family; and they space their births widely to maximize the time spent with each preschooler. Other wives who withdraw from paid employment at the start of childbearing may intend to return to work, but may be prevented from doing so by unplanned additional births and/or subfecundity which results in wider-than-planned birth spacing.

CHAPTER IV  
DATA AND METHOD  
DATA

The data used in the present research are from the National Longitudinal Survey of the Labor Market Experiences of Older Women (NLS). This survey was designed by the Ohio State University and the United States Bureau of the Census, and funded by the United States Department of Labor. The survey of older women is comprised of 8 waves to date, beginning with a comprehensive interview in 1967 and including a mail survey in 1968, three subsequent interviews in 1969, 1971, and 1972, telephone surveys in 1974 and 1976 and a final interview in 1977. However, only the first six waves were available for use in this study.

The sample of women, aged 30 to 44 in 1967, was drawn using a multi-stage probability sample of 235 areas representing every state and the District of Columbia. The sample areas were selected by grouping all counties into approximately 9,900 primary sampling units from which 235 strata were formed. These strata were relatively homogeneous as to socioeconomic characteristics. One primary sampling unit was selected from each stratum

and a probability sample of households was drawn from each selected unit to represent the civilian non-institutional population. A sampling ratio of greater than 3:1 was used to insure reliable estimates for blacks.

In the initial survey, 5,083 women were interviewed. Weights for respondents in 1967 were adjusted to account for persons not interviewed in that year due to refusal, absence or nonavailability. In addition, the sample proportions were adjusted with respect to the residence, age, color and sex characteristics of the population as a whole. These adjustments were made by carrying the 1960 Census data forward to account for population aging, mortality and cross-national migration. Sample attrition was small; approximately 87 percent of the original respondents were reinterviewed in 1974.

The data contain fairly complete work history information including several measures of current employment and work experience both prior to and since the initial survey, as well as background socioeconomic characteristics. The data also include variables related to marital events and childbearing, and contain fairly complete household record information. Overall, the NLS data set on older women is well-suited to the construction and analysis of lifetime employment patterns.

The present analysis is concerned with identifying and analyzing the employment of married women as it is patterned around the family life cycle. Hence, only married women whose worklives could be captured within a family life cycle framework are included. From the original sample of 5,083 women, all women were deleted who were not married at all of the six interview dates and who did not remain married to the same man throughout the survey years. Those wives who had been married more than once were deleted, as well, since a past disruption of the family life cycle may have had some effect on a woman's employment pattern.<sup>1</sup> In addition, all women were deleted who did not have at least one child by 1967. Wives who had their first child after the survey began were not included in the final sample because their likelihood of completing childbearing by 1974 was probably low. To the extent that wives having their first child after age thirty cluster together in terms of background characteristics, such as high education, the results will be biased against these women and the effects of such variables as college education will be underestimated. Similarly, to the extent that wives who begin childbearing this late have very small families, long marriage to first birth intervals, or close birth spacing, the effects of these

variables will also be underestimated. However, these biases should be negligible since the number of women having their first child during the survey years was low ( $N = 21$ ). Finally, all women who had given birth less than nine months after marriage were deleted since a premarital pregnancy was probably a timing failure and, thus, an aberration from the "typical" order of life cycle events assumed in constructing the typology of employment patterns. This decision necessitated the deletion of black women from the sample, since approximately half had had premarital pregnancies. Although half of all black women did not have premarital pregnancies, the inclusion of the latter portion would have created a censoring problem. That is, black women who experienced premarital pregnancies were probably different in other ways from black women who did not.<sup>2</sup> Thus, the latter group would not have been representative of black wives as a whole.

The final sample includes 1519 white women, aged 30 to 44 in 1967, who remained in their first marriage through 1974, and had at least one child by 1967 and no premarital pregnancies. These women are an atypical group, in that they have followed the normative order of life cycle events and have had no marital disruption. The sample was limited to these women in order to simplify

interpretation of the results. Wives' employment is probably related to the ordering of life cycle events as well as to their timing. The inclusion of wives whose life cycles followed different patterns (e.g., wives who had a premarital births) would have necessitated the inclusion of an additional variable to tap the order of events. Marital disruption is probably related to employment timing as well. Because the sample used here is a restricted one, the findings should be generalized only to other wives whose life cycle followed the normative pattern and who experienced no marital disruption. The employment timing of other groups of wives is equally important and should be addressed in future research.

### Constructing a Typology of Employment Patterns

#### Objective of Typology

With the exception of the never-employed group, the employment patterns discussed in Chapter III are all forms of wives' (usually discontinuous) employment. Previous studies of wives' employment have been attentive to its discontinuity, but few have dealt with the forms this discontinuity takes among women. Those that have studied employment patterns either have done so in a limited fashion or have focused on populations other than the United States.

The typology of employment patterns constructed here addresses both these concerns, in that it is a near exhaustive classification of a national sample of American wives according to their lifetime patterns of employment and non-employment. As such, it demonstrates, in retrospect, how these cohorts of women timed their employment and indicates the proportions of wives who used the various employment timing strategies.

#### Identifying Employment During Three Life Cycle Stages

The typology was constructed by tapping employment during the first three stages of the family life cycle.<sup>3</sup> The first stage begins when a woman marries and ends at her first birth. Since all of the women in the final sample were married and had at least one child by 1967, identification of this stage was not a problem. The second stage begins when the first child is born and ends when the last child is three years old. The youngest child in 1974 is assumed to be the last child. This assumption seems justified because by 1974, the women were aged 37 to 51 and most therefore had completed childbearing (Ryder and Westoff, 1971)<sup>4</sup> The third life cycle stage begins with the end of childbearing (i.e., when the last child turned three) and is open-ended, in that all employment from this point to 1974 is combined, regardless of the age of the youngest child



by 1974. The disadvantage of leaving the third stage open-ended is that information is lost for those women actually in later life cycle stages by the end of the survey. Many of the women surveyed here had entered the fourth or fifth cycle stage by 1974.<sup>5</sup> However, the literature suggests that the effects of family characteristics on wives' employment are greatest in early life cycle stages (Becker, 1965; Gove, 1973; Gronau, 1973a; Long, 1974; Terry, 1975; Waite, 1976, 1980). During these early stages, the demands on the woman as mother are at their highest and family resources (i.e., income and assets) are relatively low. Life cycle squeezes do occur later on, especially as children begin to leave home for college; but the extension of the classification to encompass later stages would have necessitated the deletion of wives not yet through those stages. Further reduction in the sample size was rejected in favor of classifying the employment of a maximum number of wives.

Wives with children in 1967 responded to several questions regarding their employment during the first life cycle stage. In the initial interview, women were asked when their last job ended, relative to their years of marriage and first birth. Possible responses were "before marriage," "between marriage and first birth," or "other" (after first birth and/or currently employed in 1967). All those who worked between marriage and first birth were asked in how

many of these years they worked six months or more. Employment during the second stage is tapped as follows. Women who had a child by 1967 were asked in how many years following their first birth they were employed six months or more. Since this question was asked of respondents in 1967, the response covers employment throughout the childbearing years among women whose last child was three by 1967. For women whose last child turned three between 1967 and 1974, the number of years given in the above response is combined with the number of years worked 26 or more weeks in each of the years between 1967 and the year the last child was three. Employment in the third stage is measured from the year the last child was three. If this occurred prior to 1967, employment is measured both prior to and since 1967. If childbearing ended in 1967 or later, employment is measured from whatever year the last child turned three.

#### Identifying Employment Patterns

The typology was created by making each employment pattern a dummy variable, coded one if the woman's employment history fit the pattern and zero otherwise. Following the definition of each employment category, wives coded one for that pattern were removed from further classification procedures. Respondents remaining after all employment patterns were defined were considered unclassifiable. As

will be seen in Chapter V, the number of such women is small. The analysis was begun by classifying respondents using eight of the possible twenty-seven patterns (see Figure 3-1). These included the TRADITNL, INTERUP, DOUBLTRK, INANDOUT, NEVEREMP, DTRKAB1, INOUTAB1, and MIDLIFE patterns. These patterns were chosen on the assumption that the cell frequencies would be high.

Wives are classified as "never-employed" (NEVEREMP) if they reported no appreciable employment during any of the three life cycle stages discussed above. Wives are coded one on NEVEREMP if they satisfied all of the following conditions: 1) they were not employed six or more months during any year between marriage and first birth; 2) they were not employed six or more months during any year between first birth and 1967; and 3) they did not work twenty-six weeks or more during any of the survey years, from 1967 through 1974. This procedure allows women to work less than six months in any year and still be classified as never-employed. The problem had no solution, however, since all questions concerning employment prior to 1967 were phrased in terms of years worked six or more months during an interval. Wives who did not satisfy all of the above conditions are coded zero, while respondents missing on any of the relevant variables are missing on NEVEREMP.

Women are classified as "traditional" (TRADITNL) if they were employed in every year between marriage and first

birth, but reported no employment thereafter. Thus, wives who worked six months or more in any year between their first birth and 1974 are coded zero on TRADITNL. Again, respondents with missing values on any of the relevant variables are missing for this employment pattern.

Wives who were employed before and after, but not during childbearing are labeled as "interrupted" (INTERUP). In order to be included in this category, a woman had to be employed six months or more in every year from marriage to first birth. She also must not have reported employment between her first birth and the year her last child turned three. Thus, if her youngest was three before 1967, the year she returned to work after her first birth must have been later than the year her last child was three. If the youngest turned three after 1966, no employment could be reported between 1967 and that year; and the variable tapping years worked after the first birth had to have a zero value, since it was measured in 1967. Finally, women classified as "interrupted" had to be employed on a continuing basis subsequent to her last child's third birthday. The minimum criteria in this regard was employment in 1974. That is, the respondent must have returned to the work force by the last wave of the survey. Women with children younger than three in 1974 had not yet completed the childbearing stage, as defined here. Those women who worked from marriage to

first birth and were employed subsequent to 1974 (i.e., after their youngest child turned three) are classified as "traditional," based on their available employment history. However, there are few such women overall ( $N = 16$ ), so misclassification of this sort is minimal.

Wives who worked continuously from marriage through 1974 are labeled "double-track" (DOUBLTRK), following the convention used by Elder and Rockwell (1967). DOUBLTRK wives were employed six or more months in every year during each life cycle stage and were out of the work force for no longer than one year following childbirths. Inclusion in this category, then, necessitates employment between marriage and first birth. In addition, the year the respondent returned to paid employment must have been the year of first birth or the following year. Because the data do not include the years of birth of children other than the first, the measurement of inter-birth employment was complex. The first step involved ascertaining whether wives were employed in every non-birth year of the childbearing stage. A variable was created which indicated the number of years between first birth and 1967. From this variable was subtracted the number of children present in 1967 minus one (for the year of birth of the first child), to indicate the number of years available for work (i.e., the number of years not occupied by childbearing) between first birth and 1967. If the actual number

of years worked between first birth and 1967 was greater than or equal to the number of years available for work, another variable (PRE67) was coded one. If the woman was employed fewer years than she had available for work, she was coded zero on PRE67. For the years beginning with 1967, a different procedure was used. For each year (1967, 1968, 1969, 1971, 1972, and 1974) a variable was created which equaled one if the respondent was employed and/or gave birth in that year, and equaled zero if she did neither.<sup>6</sup> In order to be classified as "double-track" a woman had to be coded one on each of these variables (PRE67 and each of the employment/childbirth variables from 1967 to 1974). If she spent as little as one year neither working nor childbearing, she is not considered continuously employed.

The INANDOUT pattern captures the work lives of women who were employed during each of the three life cycles stages, but were not continuously employed in any stage. Thus, these respondents reported employment of six months or more in at least one year between marriage and first birth, but not in every year. Similarly, they reported some full-year employment during childbearing and some subsequently.

Wives who were not employed between marriage and first birth, but who worked continuously thereafter, are labeled "DTRKAB1" (double-track after first birth). The computations involved in creating this variable are similar to those

described above for double-track wives. The exception is that women in the DTRKAB1 pattern could not have reported employment between their marriage and first birth (i.e., they must not have worked six months or more in any year during this interval). The wives in this category entered paid employment in the year of their first birth or during the following year.

Similarly, wives who were not employed between marriage and first birth, but who worked intermittently thereafter, are included in the INOUTAB1 group. These wives reported no full-year employment prior to their first birth, but worked six months or more in at least one year, but not in all years, of stages two and three.

Some wives remained at home during both the first and second stages and entered the work force only after their last child was three. This employment pattern is labeled MIDLIFE. In order to be included in the midlife category, women could not have worked six months or more in any year during stage one. In addition, they must not have reported significant employment during any year before their child-bearing ended. If a woman's youngest child had turned three by 1967, inclusion in this category requires that the number of years she worked between her first birth and 1967 be less than or equal to the difference between 1967 and the year of that child's third birthday. If her youngest child was

three after 1967, her inclusion requires that she did not work between first birth and 1967 and that no employment be reported after 1967 and prior to the year of that child's third birthday. Subsequent to the end of childbearing, wives in the MIDLIFE category reported employment, of twenty-six weeks or more, in every year through 1974.

As will be seen in Chapter V, the employment of approximately 85 percent of the respondents is captured using the above eight patterns. Most of the remaining respondents were as yet unclassified either due to the continuous employment restrictions of the categories (i.e., requiring women who worked during an interval to work six or more months in every year), or as a result of the restriction, in the double-track categories (DOUBLTRK and DTRKABL), requiring wives to reenter the work force one year or less after their first birth. That is, some wives worked continuously in one interval and intermittently during others; while some women worked continuously but remained at home more than one year after their first birth. Except for those restrictions, most the the unclassified women would have been either DOUBLTRK or DTRKABL.

As a result, several other employment patterns were tested. The addition of four categories resulted in the classification of almost 97 percent of the sample. One of these (INOUTINT) captures the worklives of women who worked both



before and after (but not during) childbearing, but were not continuously employed following childbearing. Thus, respondents in this seventh pattern reported employment of six months or more in every year between marriage and first birth, but not in every year following childbearing. Except for their sporadic employment in the third life cycle stage, INOUTINT wives would have been in the "interrupted" group. The eighth and ninth patterns are comprised of women who would have been classified as DOUBLTRK or DTRKAB1 did those patterns not require near immediate work force (re)entry after first birth. Wives who worked continuously in every stage but remained at home for more than one year after first birth are labeled DELDTRK (delayed double-track). Wives who were not employed between marriage and first birth but who worked continuously beginning more than one year after first birth (yet still during the childbearing stage) are called DDTRKAB1 (delayed double-track after first birth). A small number of women were employed six months or more in only one year during the three life cycle stages covered by the typology. These wives (ONE-YEAR) are grouped together regardless of the stage at which the one year of employment occurred.

Overall, twelve employment patterns were identified in the manner described above. The distribution of wives over these categories and their frequencies by cohort will be discussed in Chapter V.

## Method of Analysis

### Objective of Analysis

The objective of the typology of employment patterns is descriptive. That is, it seeks to identify the various employment timing patterns of a sample of women who, for the most part, were beyond their childbearing years. The goal of the analysis is to assess the effects of a set of independent variables on the probability that a woman's worklife followed one employment pattern rather than another. The independent variables include background, family and fertility characteristics. The objective here is to gain further insight into the factors related to the various ways of timing employment and childbearing.

### Independent Variables

Wives' lifetime employment may be associated with several diverse factors. Economic pressures may encourage them to work outside of the home on a semi-or fully continuous basis, while an early and/or rapid succession of births may induce women to remain at home. Previous research has indicated that wives' employment is negatively related to husband's income. Number of children and spacing of births have been negatively related to wives' employment, as well. One study found that employment before childbearing

is associated with the length of that stage. Other studies have shown that frequent migration disrupts wives' employment continuity, and the discontinuously employed wives in these data may have experienced frequent geographical mobility, as well. Wife's education and age at marriage have been positively related to employment in past research, and the employment of wives who are highly educated and/or who married late may have followed a pattern that allowed them to have both family and career rewards. Background characteristics, such as race, religious affiliation, rural/urban background and social class of origin also have been associated with wives' employment. Aspects of the labor market surely influence employment timing, as well. A women who seeks employment during a specific life cycle stage may be unable to find it, due to a high unemployment rate or a low availability of typically female jobs (during that period and/or in her area of residence), and/or due to a lack of job skills on her part. Low wages in available jobs may induce her to refuse potential employment, as well.

However, not all of these factors are included in the present analysis of employment patterns. As discussed previously, race is not included, since substantive and methodological factors necessitated the exculsion of black women. Religious affiliation would have been an interesting and probably valuable factor, but it is not available in

the data. Social class of origin and parents' ethnicity were either available or estimable, but are excluded to simplify the model. Although premarital labor force participation has been shown, in previous research, to be a reliable predictor of post-marital employment (Groat et al., 1976; Smith-Lovin and Tickamyer, 1978; Waite, 1980), this variable is not included in the present model. Both previous and subsequent employment are endogenous in that both are probably determined by similar variables. Therefore, models which use previous employment status to predict subsequent employment are misspecified. In addition, employment prior to marriage is omitted from the present research in order to minimize multicollinearity problems. A measure of premarital work experience was tested in preliminary analysis and was found to be highly correlated with marital timing ( $r = .403$ ,  $p = .0001$ ). Income variables (husband's income and family income) are excluded, as well. Although previous research has indicated that husband's transitory income is a good predictor of wife's employment, its inclusion in the present study was inhibited by the lack of necessary data. The NLS data include husband's annual income for the years 1966-69, 1971-72 and 1974. Yet in the present research, employment is measured as a lifetime pattern, beginning as early as 1939 and extending through 1974. The majority of employment, for most women,

occurred prior to 1966 and income variables for these earlier years are unavailable. Labor market variables (unemployment rate and industry mix for the labor market of current residence) are excluded for similar reasons. This information is available only for the years 1967 through 1974; and much of a woman's employment pattern was completed by then.

Cohort. The NLS data on older women are comprised of women born from 1923-1937. Although this time span is not a long one, it is divisible into two historically significant decades. The group born in the twenties grew up amidst the Depression and married during the years surrounding World War Two. Many of these women were among those who entered the labor market during the wartime shortage of male workers. Their children later comprised the baby boom of the early fifties, making this cohort, the group of young mothers most indoctrinated in the ethos of domesticity of that decade. Women born during the depression years were still children or adolescents during the war. They did not marry until the 1950's were well underway and, for the most part, bore their children during the prosperity of the early sixties. These two groups of women are not far apart in terms of age. However, labor force participation among married women has been increasing steadily since 1940. Current research shows significant

changes from 1940 to 1960 in the effects of several factors influencing wives to work (Waite, 1976). These findings suggest that women born in these two decades may differ in their aggregate distribution across participation patterns. It is also possible that the effects of the other variables on participation may vary across the two groups. Inclusion of the dichotomous variable COHORT in the model will facilitate investigation of both types of change.

Marital timing. Marital timing has been shown in previous research to have important consequences for wives' employment patterns and for the timing and extent of fertility (Elder and Rockwell, 1967). Marital timing, like the timing of most life events, is normatively defined. Early and late marriers are distinguishable from those who marry on time; and these definitions may vary by cohort. However, in these data, the mean age at marriage did not differ significantly by cohort (20.86 years old for older women and 20.14 years old for younger women). The standard deviation was slightly higher among the older cohort (3.44 versus 3.07). As a result, the same definitions of "early," "on time," and "late" marriage were used for both cohorts. Three years was subtracted from the mean age at marriage for the younger women to mark early marriage; and

three years was added to the mean age at marriage for older women to identify late marriage. Thus, early marriers are defined as women marrying at 17 or younger. Late marriers are women marrying at 24 or older. Women who married between the ages of 17 and 24 are considered "on time." For purposes of analysis, two dummy variables were created. Respondents who married early are coded one on EARLYMAR, while women who married on time are coded zero. Wives who married late are coded one on LATEMAR, while the on time group is coded zero.<sup>7</sup>

Timing of first birth. The length of the interval between marriage and first birth is used, rather than age at first birth, as the measure of timing of first birth. This decision was made for two reasons. First, it seems desirable to include as many aspects of fertility in the model as possible without creating the problem of multicollinearity. Age at first birth is significantly correlated with both marital timing ( $r = .69$ ,  $p = .0001$ ) and length of the marriage/first birth interval ( $r = .30$ ,  $p = .0001$ ). However, the latter two variables are virtually uncorrelated ( $r = -.03$ ,  $p = .2908$ ).<sup>8</sup> Since marital timing and length of the marriage/first birth interval seem potentially able to contribute more information to the model than age at first birth alone, the former two variables were chosen. The variable "timing of first birth" was created in much

the same way as marital timing. That is, the number of months between marriage and first birth was calculated for each respondent in the sample, and the standard deviation was added to and subtracted from the mean. A short interval is defined as one of 12 months or less. If more than 36 months intervened between marriage and first birth, the interval is a long one. Those women for whom 13 to 36 months elapsed between the two events are defined as having had an average interval. Again, two dummy variables were created from the three interval lengths. Wives who had a short interval are contrasted with wives who had an average interval, by coding the former group one on SHORTINT and the latter group zero. Women who had a long interval are coded one on LONGINT, while those having an average interval are coded zero.<sup>9</sup>

Number of children. The NLS data provide information on the number of children who have left home before 1967. The data also contain variables tapping the number of newborns, toddlers, preschoolers, elementary-aged children, teens and children over 18 in the home in each wave from 1967 through 1972. These latter variables were summed for 1967 and 1972; and a new variable was created, representing the maximum number of children in either year. Thus, if more children were present in 1972 than were present in 1967 (i.e., if family size grew between the two waves), the



1972 value was assigned to the new variable. Conversely, if the 1967 value was greater than the 1972 value (i.e., if children left home between 1967 and 1972), the new variable represented the number of children present in 1967. If family size was constant from 1967 to 1972, the 1967 value was used. However, in order to measure the actual maximum family size, the maximum number of children present during the survey years had to be added to the number of children who had left the home before 1967. This computation provided the continuous variable TOTKIDS, representing the total number of children ever residing in the respondent's home.

Spacing of births. Spacing is defined here as the average number of years between births. This conceptualization is used because the data do not provide the actual birth years of children other than the first. Average birth spacing was computed using the ratio, number of years between first and last births divided by the maximum number of children in the home (TOTKIDS). Close spacing is defined as less than 2 years between births. Four years or more between births is considered wide spacing; while the 2-4 year span is defined as average birth spacing. Spacing of births has no meaning for wives with only one birth. In order to incorporate them in the analysis, wives with one

child were assigned a value of "average" on birth spacing.<sup>10</sup> Two dummy variables were created for purposes of analysis. Respondents with close spacing are coded one on CLOSE, while women having average spacing are coded zero. Similarly, wives having wide spacing are coded one on WIDE, while respondents with average spacing are coded zero.

Education. Wife's education has been used as a proxy for several other phenomena, including propensity for employment, potential wage and employment opportunity. Education probably reflects propensity for work only under certain conditions (i.e., when a woman is highly educated and/or when her family economic situation is stable enough to leave the work option open). Thus, wife's education is not intended solely as a measure of the desire to work in the present model. Rather, it is included as a general indicator of wage potential and employment opportunity, since the use of these latter types of variables was prohibited by the absence of early measures in the data. Of course, education is not a precise measure of wages and labor market opportunities, but it was the best measure available for this purpose. In spite of the high correlation between wife's and husband's educations ( $r = .60$ ,  $p = .0001$ ), both variables are included in the model. The net effects of husband's and wife's education on wife's

employment pattern are assumed to reflect somewhat different phenomena. While wife's education taps her potential wage and employment opportunity, husband's education is a proxy for his permanent income.<sup>11</sup> All of these factors are important in modeling wives' work patterns, since wife's wage potential and employment opportunity are positively related to her employment and husband's income is negatively related to employment. Each education variable was converted to a set of six dummy variables, in order to allow for nonlinearity. The dummy variables are: less than 9 years of schooling, 9-11 years of schooling, some college, college graduate, and graduate education. High school graduates was the omitted group. The net effects of the husband's and wife's education variables are believed to be the best available measures of the various inducements to wife's employment.

Marital mobility. Wives' employment is often dependent on the relationship between family need and family resources. However, need is a relative concept and probably has much to do with individuals' expectations based on both early socialization and the overall economic situation surrounding their upbringing (Easterlin, 1968). Wives who marry "up" may be less likely to work, net of other factors, because their standard of living expectations are more likely to be met by available family resources. On the other hand,

wives who are downwardly mobile through marriage may be more likely to be employed, controlling for other variables, since their expectations concerning a reasonable standard of living are higher. Marital mobility is measured here by comparing the wife's father's occupational prestige when she was fifteen to her husband's occupational prestige in 1966 (i.e., when the wife was 29-43). The NLS data contain the Duncan Socioeconomic Index of Occupation for both father and husband. This index was divided into five categories of approximately twenty points each. Typical occupations in each category are as follows: 1) farm laborers, truck drivers, and barbers; 2) welders, plumbers and mechanics; 3) insurance agents, technicians and photographers; 4) public school teachers, accountants and chiropractors; and 5) lawyers, professors and physicians. Father's occupation was divided by husband's occupation and a three level variable was created. If the ratio was less than one, husband's occupational prestige was higher; if it was greater than one, father's occupational prestige was higher. A ratio of one indicated equal status occupations. Two dummy variables were used, with equal status being the omitted group.

Frequency of geographical mobility. Previous research has indicated the relevance of migration to wives' employment (Long, 1974; Sandell, 1976). In general, migration may

decrease the wife's probability of employment by increasing husband's income and by disrupting the wife's career, if she was previously employed. The concept is measured here as the frequency of inter-SMSA mobility between the completion of schooling and 1974. The variable begins measurement at the completion of schooling in order to include any inter-SMSA move upon marriage. The NLS data contain variables for the year the respondent stopped attending school, the year she married and the year of her first birth. Each of these was subtracted from 67 to yield the number of years elapsed between each event and 1967. The data also contain a variable for the number of years, prior to 1967, that the respondent had lived at her current place of residence. Using this variable and those indicating the years between 1967 and school, marriage and first birth, a series of dummy variables was created. These were coded one if the respondent moved during an interval and zero if she did not move. For example, if the number of years she had lived at her current place of residence was greater than or equal to the number of years that had elapsed since her marriage, but less than the number of years since she completed full-time school, the variable representing migration between school and marriage was coded one. Otherwise, the variable was coded zero.<sup>12</sup> Dummy variables were created similarly for the intervals between marriage and 1967 and

first birth and 1967. In order to delete the overlap in the latter two intervals, another variable was created; coded one if migration occurred between marriage and 1967 but not between first birth and 1967. This new variable indicated migration between marriage and first birth. For the years following 1967, the NLS data contain variables comparing the SMSA of residence for 1967/1969, 1969/1971, and 1971/1972 and comparing the county of residence for 1967/1974. Dummy variables were again created for each interval, with "one" representing a move during that time period and "zero" representing no move. Since the variable in the 1974 data was a comprehensive one (1967/1974), that dummy was coded one if there was an inter-county move between 1967 and 1974 but no inter-SMSA migration in the three previous intervals (1967/1969, 1969/1971, 1971/1972). Thus, the 1974 variable was converted to represent migration between 1972 and 1974. Finally, the values for each interval (school/marriage, marriage/first birth, first birth/1967, 1967/1969, 1969/1971, 1971/1972, and 1972/1974) were summed to obtain the total frequency of geographical mobility from the completion of school to 1974.

Farm/nonfarm background. Previous research has found rural women less likely to be employed and employed rural women less likely to have a career commitment to the work force (Sweet, 1972a; Chenoweth and Maret-Havens, 1978). In

the present research, two variables were used to tap the rural/urban dimension of the respondent's background. One was her type of residence at age 15. The other was father's occupation. If the respondent lived on a farm when she was 15 or if her father was a farmer or farm laborer, the variable "FARM" was coded one. In all other cases, it was given a value of zero.

The present analysis attempts to assess the effects of a set of independent variables on the probability that a woman's worklife followed one pattern, rather than a closely related one. Towards this goal, six dummy variable employment pattern contrasts are created and are used as a series of dependent variables. These contrasts are described in Chapter VI.

### Interaction Terms

Two kinds of interaction were tested in each contrast. Because the effects of the independent variables on employment may vary by cohort, cohort interaction terms were included for each contrast. These were multiplicative interactions, created by multiplying respondents' values on each independent variable by their values on COHORT.

The second type of interaction tested for each contrast was the interaction between spacing and number of children. Cogan and Berger (1973) found that the effect of number of

children on years of work experience varied by the spacing of births. That is, the negative effect of number of children was greater, the wider the birth intervals. This finding is relevant to the present analysis because, in many of the contrasts, one pattern represents more work experience than the other. Therefore, "CLOSEKID" and "WIDEKID" (spacing of births\*number of children) were included in each contrast to test for this second sort of interaction.<sup>13</sup>

### Method of Analysis

When a response variable is defined as a dummy variable contrast, an analysis based on logits is an appropriate and convenient way to assess the effects of a set of explanatory variables on the probability of being in one of the two dependent variable categories. The Nerlove and Press (1973) program is used in this study to estimate logistic response models for each contrast. The response variables are defined as dummy variable contrasts. A dummy variable divides observations into two groups denoting membership ( $Y = 1$ ) and non-membership ( $Y = 0$ ).<sup>14</sup> Each model estimates the respondent's probability of being in the membership group (i.e., the employment pattern coded one in that contrast) for a given set of values on the independent variables.<sup>15</sup> However, these probabilities are not observable.



Only the binary (0,1) outcomes are observed. If a linear probability model is used with a dichotomous dependent variable, the expected values of the error terms (i.e., the differences between the observed and the expected values of  $Y$  for given values of  $X$ ) are dependent on the value of  $X$ , and the values of the estimated coefficients are sample-dependent. This correlation violates an assumption of ordinary least squares (i.e., that the error terms are uncorrelated with the values of  $X$ ).

A function involving a dichotomous dependent variable must be nonlinear at its boundaries, to reflect that a change in the probability of  $Y = 1$  (or of  $Y = 0$ ) is more difficult to obtain when the probability is closer to the limits. With binary observations, the true probability is S-shaped (i.e., it has a logistic distribution), and estimating a linear probability model introduces a second type of error. That is, the difference between the estimated linear probability distribution and the true distribution is dependent on the value of  $X$ .

The Nerlove and Press program utilizes a maximum likelihood procedure which derives an expression for the likelihood of obtaining the given sample by taking the product of the probabilities that individual observations have the observed outcomes ( $Y = 1, Y = 0$ ). This procedure differs from the least squares method in that it chooses

the values of  $b$  that would be most likely to have produced the observed data (i.e., those  $b$  values that maximize the log of the likelihood function),<sup>16</sup> rather than choosing the values of  $b$  that minimize the sum of squared errors.<sup>17</sup>

### Missing Data

In the present analysis, the problem of what to do with respondents who dropped out after the initial survey had a relatively simple solution. In order to classify women in terms of lifetime employment patterns, the women had to respond in each survey year. Those who did not, therefore, had no value on the dependent variable in the actual analysis. They could not be assigned the overall mean on the dependent variable, since the dependent variables are categorical. Random assignment could not be used for similar reasons.<sup>18</sup> The reasons for not using the estimation method are more complex.<sup>19</sup> In terms of employment, work during later waves would have had to be predicted from work prior to 1967 for respondents. These estimates would then have been used to predict later employment from earlier employment for nonrespondents. Although previous research indicates that work in later life cycle stages can be estimated relatively accurately using work in earlier stages, the interest here is in employment patterns over the life cycle. Incorporating life cycle stage into the above estimation

procedure would have been a formidable task and was rejected in favor of deleting all cases not present on all waves. The original representativeness of the sample was comprised little, since only fifteen cases were involved.

The second type of missing data problem involves missing values on individual variables (i.e., when the respondent was interviewed). This problem occurs in two circumstances. First, the respondent may not have been able to provide the information requested ("don't knows"). Second, in creating new variables from the original data, the created variables may be missing as a result of missing data on the component variables. Neither of these events occurred frequently enough to pose a problem in creating the typology of employment patterns. Virtually all married women with children were able to provide information pertaining to their year of marriage, the year their first child was born, and their periods of employment, both in their early life cycle stages and more recently. The household record information is fairly complete for these older women, so the ages of their youngest children during the later waves were mostly obtainable. As will be discussed in Chapter V, only three percent of the sample is unclassifiable in terms of employment pattern, mainly as a result of missing data. Missing data presented no problem in terms of the independent variables used in the analysis of employment patterns.

Notes to Chapter IV

<sup>1</sup>Although this supposition is an interesting research hypothesis, its analysis was not undertaken here. Inclusion of these women in the present analysis probably would have confounded its results.

<sup>2</sup>Norton's (1974) work on the family life cycle suggests an additional reason for excluding black women from the present analysis. That is, white women marry later than black women and begin childbearing later, but white women complete childbearing earlier due to their smaller completed family size. Thus, the inclusion of blacks would confound the effects of age and life cycle stage, since black women would be younger than white women, at least during stages one and two. Of course, age may vary in each stage among white women as well, but it is assumed to vary less within than between racial groups. The effect of respondent's age at each stage on employment would be an interesting topic for future research.

<sup>3</sup>The present study deals with wives' employment, rather than their labor force participation. That is, the typology captures the patterns in which wives worked, rather than the patterns in which they sought (and, possibly, did not obtain) employment. The difference in these two conceptualizations involves the effects of aspects of the labor market (e.g., the availability of jobs). For reasons which will be discussed further on (see pp. 79-80), labor market variables were not included in the present analysis. Employment was measured, instead of labor force participation, for two reasons. The work history data were more complete for employment than for labor force participation; and actual employment, rather than availability for work, is probably what affects family roles and fertility decisions.

<sup>4</sup>Greater certainty concerning the completion of childbearing could have been obtained by ending the second life cycle stage when the last child was six years old. Three was chosen, however, because, in classifying wives' employment patterns, it was found that many women returned to paid employment after the youngest child was three, rather than six years old. So, certainty as to the completion of childbearing was compromised in favor of parsimony in the classification scheme.

<sup>5</sup> A fourth stage begins when the first child leaves home, while a fifth stage is initiated when the last child leaves (Waite, 1980).

<sup>6</sup> Whenever two years elapsed between surveys (i.e., 1969-71 and 1972-74), the variable was coded one if the woman was employed at least half of each year and/or if she had a child less than two years old at the survey date and worked at least twenty-six weeks over the two year period.

<sup>7</sup> These age spans are somewhat arbitrary and the largest proportions of women married on time. To the extent that the definitions used here of early and late marriage are too narrow, the effects of these variables will be underestimated.

<sup>8</sup> These correlations are not included in the matrix presented in Chapter VI, because age at first birth was not used in the analysis.

<sup>9</sup> Again, to the extent that the extremes, as defined here, are too excessive, their effects will be underestimated.

<sup>10</sup> The number of these women was not small ( $N = 180$ ), so their inclusion in the average spacing category may have biased downward the effects of close and wide spacing.

<sup>11</sup> Husband's income could not be used, for the reasons previously discussed (see p. 79).

<sup>12</sup> This variable will always have a value of zero for wives who completed full-time schooling after they married; so frequency of geographical mobility may be underestimated for these wives. The number of women in this sample who attended school full-time after marriage is small ( $N = 40$ ).

<sup>13</sup> Several potentially important interaction terms are not tested. Among these are SPACING \* MARITAL, SPACING \* TIMING, MARITAL \* TIMING. The effect of birth spacing on employment may differ when marriage and/or first birth occur late in life, rather than early. Similarly, the effect of timing of first birth may differ among late and early marriers.

<sup>14</sup>For example, the variable DOUBLTRK is coded one if a woman was continuously employed and zero otherwise. Likewise, the second contrast CONTINUS is coded one if a woman was continuously employed (i.e., if she followed the DOUBLTRK pattern) and zero if she followed the INANDOUT pattern.

<sup>15</sup>Some might argue that one disadvantage, in terms of the present analysis, lies in the program's labeling of the variables as dependent (response) and independent (explanatory). This aspect of the procedure could be construed as implying that the fertility variables used here (e.g., timing of first birth, birth spacing, and number of children) are assumed to cause wives' employment patterns. Yet this judgement would be an erroneous one, for two reasons. First, the logit procedure actually produces identical coefficients, regardless of whether a variable is labeled dependent or explanatory. That is, the effect of birth spacing on employment pattern turns out to be the same as the effect of employment pattern on birth spacing. Secondly, this is as it should be, since no assumption regarding causal sequence is made in this study. Rather, the assumption is that decisions concerning fertility and employment are made and altered simultaneously.

<sup>16</sup>The log likelihood function multiplied by -2 is distributed as  $\chi^2$ .

<sup>17</sup>The antilogs of the logit coefficients are interpreted in the same way as regression coefficients. These antilogs represent the predicted proportional changes in the probability of being in the membership group ( $Y = 1$ ) for unit changes in the independent variables. The formula  $B[P(1 - P)]$  is used here to compute these terms.  $B$  is the logit coefficient for any independent variable in a model and  $P$  is the mean of the dependent variable.

<sup>18</sup>In random assignment, the sample is divided into groups on the basis of a variable which distinguishes between respondents and nonrespondents. Missing values for nonrespondents are replaced with the values of the nearest respondent. In using this method, one is assuming that nonrespondents who resemble respondents on one variable will resemble them on others.

<sup>19</sup>The estimation method uses the data on respondents to estimate a model which satisfactorily predicts their subsequent responses from their values on variables in earlier waves. The model is then used to predict values for

nonrespondents to later waves from their initial responses. These predicted values are used as data. The assumption here is that the relationships between variables across waves are similar for respondents and nonrespondents. A second assumption is that the variables measured in the first waves can be used to accurately predict variable values in later waves.

## CHAPTER V TYPOLOGY OF EMPLOYMENT PATTERNS

### Introduction

The generally discontinuous employment of married women takes various forms. Although the patterns followed by Australian wives have been classified extensively (Young, 1978), the employment patterns of wives in the United States have been studied in only a limited fashion (Elder and Rockwell, 1967). Several possible employment patterns were discussed in Chapter III. The present chapter addresses the problem by presenting a comprehensive typology of American wives' employment patterns over the first three stages of the family life cycle.

A typology is a descriptive tool, in that it demonstrates the range of variability of a phenomenon and indicates the frequencies of occurrence of the component events. The typology of employment patterns presented here demonstrates the various strategies wives used in managing their multiple roles, and indicates the proportions of wives in the United States who followed the different patterns. In addition to its descriptive function, the typology serves as the basis for creating the dependent variable contrasts used in analyzing the determinants of wives' employment patterns. Those



contrasts are reviewed in the last section of the present chapter and the results of that analysis are presented in Chapter VI.

### Typology

#### Distribution Over Twelve Employment Patterns

As described in Chapter IV, the typology was constructed by tapping employment during the first three stages of the family life cycle. Twelve distinct employment patterns were found to describe the worklives of ninety-seven percent of the women in this sample. A pictorial representation of the twelve patterns and the distribution of wives across the groups is shown in Figure 5-1. The solid bars represent continuous, full-year employment, while the dotted bars depict discontinuous full-year employment. Blank areas represent no full-year employment. The cell frequencies and percentage distributions are presented at the far right of the table.

The distribution of wives over the twelve employment patterns reveals much about the ways in which women born in the 1920's and 1930's dealt with their multiple roles. First, it shows that most wives with children did, in fact, have multiple roles to manage. Only fifteen percent ( $N = 226$ ) of the 1519 women in this sample were never employed. A full eighty-five percent worked outside of the home during at least one life cycle stage. Secondly, of the ever-employed

women (N = 1246), more than half (N = 736, 59 percent) worked between marriage and first birth, when role conflict is minimal and expenses tend to strain family resources.

Third, most wives employed in the first life cycle stage worked in later stages, as well. Of the women employed between marriage and first birth, sixteen percent (N = 115) never returned to the work force after first birth; twenty-five percent (N = 186) remained at home during childbearing and resumed employment during stage three; fourteen percent (N = 103) worked continuously throughout their childbearing and childrearing years; and forty-five percent (N = 332) worked sporadically in every stage. These groups comprise eight, twelve, seven and twenty-two percent of the total sample, respectively.

Fourth, many wives not employed between marriage and first birth entered the work force during later life cycle stages. Ever-employed wives who were not employed during the first stage made up thirty-two percent of the total sample. These women were most likely to enter the work force after first birth and work sporadically during stages two and three. Wives who did so comprised forty-eight percent (N = 242) of those not employed during stage one and sixteen percent of the total sample. The next most frequent pattern followed by wives who did not work between marriage and first birth was one of continued absence from the work force until childbearing was over.

These wives comprised thirty-three percent of that group (N = 169) and eleven percent of the total sample. Wives who worked continuously in all stages after the first were a minority (fifteen percent of the subsample, five percent of the total).

#### Distribution by Cohort

The data used in this analysis are comprised of two birth cohorts, one born between 1923 and 1929 and the other born between 1930 and 1937. At least two factors suggest that the distribution of women over the employment patterns may differ by cohort. First, the two cohorts of women began their worklives under different conditions in the female labor market. The older women became of working age during World War II, when the shortage of male workers created a high demand for female labor. The younger cohort, on the other hand, became of age during the 1950's, when war veterans had returned to reclaim their jobs and the employment of wives was discouraged. These historic differences would lead one to believe that the older cohort may have been more likely than the younger cohort to have worked during the first life cycle stage. Second, social conditions differed for the two cohorts during their child-bearing years. The older cohort gave birth to the baby boom of the late 1940's and early 1950's, when the employment

of young mothers was considered detrimental, both to the well-being of the children and to family stability. The younger cohort, for the most part, bore their children a decade later, when the young mother was an increasingly familiar and more accepted participant in the work force. Thus, it is reasonable to expect the younger cohort to display a greater frequency in those patterns characterized by employment during the childbearing years.

Table 5-1 shows the cohort distribution over the twelve employment patterns. The  $\chi^2$  values in column 3 of the table refer to the cohort differences in each 2 x 2 section. As can be seen from the table, only two employment patterns had significant cohort differences. The older cohort was significantly more likely to follow the INOUTINT pattern than was the younger cohort. The frequencies in both cells, however, were very small. Yet this finding does lend some support to the hypotheses suggested above. That is, the older women were more likely than the younger wives to work continuously before and sporadically after childbearing, and to remain at home while their children were small. However, in the other "in-out-in" pattern (INTERUP), the cohorts did not differ significantly from each other. That is, older wives were not more likely than younger wives to work continuously before first birth, remain at home during childbearing, and resume continuous employment after

childbearing. The other significant cohort difference was found among the INANDOUT group. The younger wives were significantly more likely than the older women to have engaged in sporadic employment during all three stages. Perhaps the changing mores allowed younger families to more readily utilize the wife's earning power during periods of family financial strain or when a major expenditure was anticipated.

Aside from the two cohort differences just discussed, none of the other employment patterns was significantly more frequent among either cohort. Both cohorts were equally likely to be never-employed. Although the two groups came of working age under different conditions in the female labor market, they were equally likely to be employed only between marriage and first birth (TRADITNL). Similarly, there were no significant differences between the cohorts in terms of the other three employment patterns characterized by continuous employment during stage one (INTERUP, DOUBLTRK and DELDTRK).

Despite the lack of cohort differences in employment patterns, the women in the two groups may have followed particular patterns for different reasons. For example, wives in the older cohort who worked continuously (DOUBLTRK) may have done so more often out of economic necessity, while their younger counterparts may have been more career-oriented.

If this were the case, one would expect to find a significant cohort difference in the effect of education on employment pattern. That is, high education may not increase the likelihood of being continuously employed among older wives, but may significantly increase this probability among the younger cohort. Cohort interaction terms were included in the LOGIT models in order to investigate such possibilities (see Chapter VI).

#### Collapsing the Typology

As can be seen in Table 5-1, several of the cells have relatively low frequencies. Several of these closely resemble other patterns of greater frequency. Thus, for purposes of analysis, observations in the following patterns were collapsed into other patterns. INOUTINT wives (N = 27) were included in the INTERUP group; DELDTRK wives were included in the DOUBLTRK group; and DELDTRKO wives were included in the DTRKAB1 group. ONEYEAR wives were excluded from the analysis, since one year of employment constitutes no real pattern. Therefore, the employment pattern contrasts were created from the following set of eight patterns: NEVEREMP (N = 226), TRADITNL (N = 115), INTERUP (N = 186), DOUBLTRK (N = 103), DTRKAB1 (N = 78), MIDLIFE (N = 169), INANDOUT (N = 332), and INOUTAB1 (N = 242).

## Review of Contrasts

### Introduction

The typology suggests many interesting questions which might be posed regarding wives' employment. Three issues are dealt with in the present research. The first involves why some wives are never employed, while most work for pay at some stage of the family life cycle; the second involves factors related to the discontinuity of female employment; and the third addresses why women who work do so in such dissimilar patterns. Six models are estimated, each assessing the effects of family characteristics on a different contrast of employment patterns. The results of these analyses are discussed in Chapter VI.

As described in Chapter IV, the independent variables used in the analysis included cohort (1923-29/1930-37), marital timing (early, on-time, late), timing of first birth (long, average, short marriage to first birth interval), number of children, spacing of births (close, average, wide), wife's education, husband's education, marital mobility (father's occupational prestige: greater than husband's, equal to husband's, less than husband's), frequency of geographical mobility and farm/nonfarm background.

Two types of interaction terms were included in each model, as well. Cohort interactions tested whether the effects

of the other independent variables differed among the older and younger wives, while SPACEKID interactions (birth spacing\* number of children) tested whether the effect of number of children varied by birth spacing. Because the two cohorts of wives passed through the three early life cycle stages at different historical periods, we might expect to find some significant cohort interaction in each model. However, the literature provides few clues as to which effects may vary for the two groups. The present analysis is an exploratory one in this respect.

The SPACEKID interaction may be significant whenever either of its components is significant. For example, if wide birth spacing or a large number of children makes one more likely to be never-employed, then the negative effect of number of children on employment should be greater when births are widely spaced. Based partly on the findings of previous research and partly on the reasoning presented below, we can expect the following concerning the employment patterns contrasted in the five models.

#### Never and Ever-Employed Wives

The first model in Chapter VI addresses the effects of family characteristics on a contrast of never-employed and ever-employed wives. Wives may remain consistently nonemployed, rather than follow one of the life cycle patterns



of employment, for several reasons. One reason is financial. If a woman has few job skills or if she is relatively satisfied with the standard of living provided by her husband's resources, then her likelihood of being never-employed should be high. Because wife's education is assumed, in this analysis, to tap wife's employability (i.e., job skills), we would expect the likelihood of being never-employed to increase significantly the lower the wife's education. A ratio of father's/husband's occupational prestige was used as a measure of marital mobility. Wives who married "up" are assumed more likely to be satisfied with the standards of living made possible by their husbands' jobs. These women may perceive less financial necessity to work and may be more likely to be never-employed. On the other hand, wives who experience marital standards of living lower than those to which they were accustomed should be more likely themselves to engage in paid employment at some point in the family life cycle.

The second set of factors expected to influence the likelihood of being never-employed are fertility-related. In general, the longer and more intense a woman's childbearing period, the more likely she is to be never-employed. The length and intensity of childbearing is determined jointly by the timing of first birth, the spacing of births, and the number of children (completed family size).

The timing of first birth, measured as the length of the marriage/first birth interval, may differ significantly from the timing measured as age at first birth. A woman who married early could have had a long marriage/first birth interval without having had a late age at first birth. Two previous studies which used the timing of first birth in relation to marriage found that a short interval was related to less overall lifetime employment (Bowers and Hastings, 1970; Groat et al., 1976). Yet some EMPLOYED wives share with NEVEREMP wives the characteristic of absence from the work force during stage one; and a short marriage/first birth interval is probably most strongly and negatively related to employment during that stage (Young, 1978). As a result, this variable may not differentiate the never-employed and ever-employed wives in the present contrast.

Number of children has been shown to be negatively related to employment in many studies (e.g., Waite and Stolzenberg, 1976; Smith-Lovin and Tickamyer, 1978; Cramer, 1980), and here we can expect the likelihood of being never-employed to increase, the greater the completed family size. Although spacing may also be negatively related to employment, the effect is probably strongest during the childbearing years. Spacing of births may not be significant in this contrast because several employment patterns share with the NEVEREMP pattern the characteristic of being out of the work

force during childbearing. However, the effect of number of children may vary by their spacing (Cogan and Berger, 1978). Wives who had many children, closely spaced, may not be more likely to be never-employed than ever-employed, while wives with many children, widely spaced, may be significantly more likely to be never-employed.

This is not to say that expected fertility or fertility patterns cause employment or that expected employment causes fertility. In fact, the direction of causality in the employment/fertility relationship may be different for different women. For wives who pursue a career, it may be plausible to argue that employment decisions are prior to and "cause" fertility plans. Among never-employed women, fertility plans may have been given precedence over employment, or employment may never have been feasible because a new pregnancy occurred just as the intensive child care necessitated by the previous baby had ended. Yet for most women, decisions regarding employment and fertility are probably made jointly, as the choice of a strategy with which to balance the two depends on their simultaneous consideration. The choice of strategy may be modified as expectations regarding work, fertility, or other factors go unfulfilled. Yet even in modifying the original plan, current fertility and fertility preferences are considered jointly with wife's employment preferences and/or the expected future necessity of her employment.

Although not directly related to the duration and intensity of childbearing, marital timing may be associated with a woman's likelihood of being never-employed, as well. Previous research has found both early and late marriage associated with a greater likelihood of employment among wives (Elder and Rockwell, 1967; Waite and Spitze, 1978). Early marriers tend to be low on education, have an early first birth, and work out of financial necessity. Late marriers, on the other hand, tend to be career-oriented women, to be highly educated and to have a delayed first birth. In the present analysis, we can expect to find the likelihood of being never-employed to be U-shaped. Both early and late marriers should be significantly less likely to be never-employed than are women who married on-time.

The third general issue related to wives' employment is their frequency of geographical mobility. Several studies have found that residential mobility inhibits wives' employment and/or negatively affects their wages (Long, 1974; Duncan and Perrucci, 1976; Sandell, 1976). The wives' frequency of mobility since their completion of formal schooling is expected to bear a similar relationship to the NEVEREMP/EMPLOYED contrast studied here. That is, the greater the frequency of geographical mobility, the greater the likelihood that a woman will be never-employed.

It is unclear whether the variable farm/nonfarm background will discriminate between the two groups in this

contrast. Rural origins have been linked to both early marriage and employment in one study (Elder and Rockwell, 1967); but other literature suggests that rural wives are generally less likely to be employed than are urban wives (Sweet, 1972a; Chenoweth and Maret-Havens, 1978). This analysis is more likely to find support for Elder and Rockwell's result, because both that study and the present research used wife's area of origin to tap the rural/urban dimension, while most of the other research used wife's adult labor market setting. However, if rural women tended to maintain rural residence after marriage, their likelihood of employment may be low, due to their relatively low education (Sweet, 1972a).

In both the present and subsequent contrasts, the effects of many of the independent variables are expected to vary by cohort. Some of the relationships discussed above (and in subsequent sections) may be found among one cohort and not the other; or the relationships may differ, in direction or degree, between the two cohorts.

#### Continuous/Discontinuous Employment

The second model investigates factors related to the discontinuity of wives' employment by assessing the effects of family characteristics on a contrast of continuous workers (DOUBLTRK) and wives who exhibited sporadic employment in

every life cycle state (INANDOUT). Regardless of the motivation for continuous employment (i.e., necessity or personal satisfaction), most DOUBLTRK women probably realized early on that they would always be working. INANDOUT women may be wives with no real labor force attachment who worked only when pressed by immediate financial need, or they may be wives who would have been employed continuously had their long-range plans been carried out. Thus, the INANDOUT pattern may represent a lesser degree of planning, or less successful planning, in terms of juggling home and employment roles than does the DOUBLTRK pattern.

If such is the case, then fertility-related variables should discriminate between wives in the two employment patterns.<sup>1</sup> INANDOUT wives should be less likely than DOUBLTRK wives to have had a longer marriage/first birth interval, either because they did not plan to work at this stage or because their first birth was unexpected. INANDOUT wives also may have had more children, or more closely spaced births than did wives in the DOUBLTRK pattern. Again, fertility may have been give priority over employment, or it may have been unintended. If either of the previous effects are significant, the SPACEKID interaction may also be significant. That is, the effect of number of children may be greater, the closer their spacing. In comparison to continuous workers, the childbearing period of INANDOUT wives may have been more

lengthy and/or more intense. Wives in the INANDOUT group may have had shorter marriage/first birth intervals, more children and/or more closely spaced births because they did not plan for the role demands of employment or they may have been employed only sporadically due to a series of unplanned or earlier-than-planned births. In the latter case, unplanned births may have interrupted what would have otherwise have been a continuous worklife.

Regardless of the significance of fertility-related effects, another variable which may differentiate between the DOUBLTRK and the INANDOUT patterns is frequency of geographical mobility. INANDOUT wives may not have been able to maintain continuous employment because their husbands' occupations (or some other factors) required frequent moving (Long, 1974; Duncan and Perrucci, 1976; Sandell, 1976). In the model estimated here, we should find that the greater the frequency of geographical mobility, the greater the likelihood of wives' employment following the INANDOUT, rather than the DOUBLTRK, pattern.

The remaining five variables are not expected to be significant in this model contrasting DOUBLTRK and INANDOUT wives. Rual origins have been related, in previous research, to the DOUBLTRK pattern (Elder and Rockwell, 1967). Yet that study did not distinguish between wives who worked continuously and sporadically in every stage. Elder and

Rockwell found continuous employment was related to a configuration of characteristics indicating economic disadvantage (e.g., Southern or rural origins. lower socioeconomic background, early marriage, and a greater than average number of siblings). Since there is no basis on which to suggest that DOUBLTRK wives are more economically disadvantaged than are INANDOUT wives, one can not expect the variables farm/nonfarm background, wife's education or husband's education to be significant. Because neither group is likely to be advantaged in terms of education, neither seems more likely to have married earlier or later than the other. Similarly, there is no reason to believe the two groups differ in terms of marital mobility.

#### Life Cycle Employment Patterns

The first two contrasts, discussed above, addressed different aspects of wives' employment over the three early life cycle stages. The next four contrasts focus on the dissimilarity in wives' employment patterns, by assessing the effects of family characteristics on wives' probability of employment before, during and after childbearing. That is, the contrasts concern wives employed and not employed in each life cycle stage. Two contrasts are used to address third stage employment, one representing work force reentry in that stage and the other reflecting initial employment in midlife.



Employment before childbearing. The third model assesses the effects of family characteristics on a contrast of wives in the DTRKAB1 and DOUBLTRK patterns. While DOUBLTRK wives engaged in paid employment since their marriage, wives in the DTRKAB1 group delayed their work force entry until stage two. Once employed, both groups worked continuously throughout subsequent life cycle stages. By contrasting these two employment patterns, the model should indicate factors related to first stage employment and should provide some preliminary understanding of the dynamics of delayed work force entry.

There is little in the female employment literature directly applicable to delayed work force entry. Because Young (1978) found that a short marriage/first birth interval was related to nonemployment during that interval, one can expect wives with a short marriage/first birth interval to be more likely to follow the DTRKAB1 pattern in this contrast. DTRKAB1 wives may have intended to work in every stage, but their employment during stage one may have been impeded by an earlier-than-planned first birth. Residential migration has been found to have a negative effect on employment, as well (Long, 1974; Duncan and Perrucci, 1976). Although the measure used here is a cumulative one, reflecting all migration from the completion of schooling through 1974, most geographical mobility probably occurred early in the life cycle

and this variable may be significantly related to first stage employment.<sup>2</sup>

Employment during childbearing. The fourth model assesses the effects of family characteristics on a contrast of wives in the DOUBLTRK and INTERUP patterns. While INTERUP wives were employed during stages one and three, DOUBLTRK wives were employed continuously throughout the three early life cycle stages. By contrasting these two employment patterns, the model should indicate the factors related to employment during the arduous childbearing period.

The implications of previous research are contradictory when applied to the DOUBLTRK/INTERUP contrast. This is especially true regarding the probable effects of fertility-related variables. The negative relationship between number of children and years of employment is a well-accepted one, and, continuous workers (DOUBLTRK) may have fewer children than INTERUP wives. Yet if the suppositions posed in the previous section are correct (i.e., INTERUP wives tend to be highly educated and have few children, closely spaced, in order to minimize the length of childbearing and return to the work force), INTERUP wives may have no more, or fewer children than continuous workers do.

This argument is applicable to birth spacing, as well. Close spacing has been linked to high wife's education (Bum-pass and Westoff, 1970; Ross, 1974). If INTERUP wives are a

highly educated, career-oriented group who wish to remain at home during the childbearing stage, they may have significantly closer birth spacing than the DOUBLTRK wives.

Wives who work continuously probably fall into two groups: those who can not afford to leave their jobs and those who remain in the work force between births for career-related reasons. In either case, we can expect to find DOUBLTRK wives have significantly wider birth spacing than the INTERUP group because wide spacing would minimize the expense of child care and maximize the time available for work between pregnancies (Bowers and Hastings, 1970). Again, the SPACEKID interaction should be significant. Wives with many children widely spaced would be even more likely to work continuously than wives with many children closely spaced.

As in the previous contrast, the third fertility-related variable, "timing of first birth," will probably not differentiate between DOUBLTRK and INTERUP wives. Both groups were in the work force during stage one, so both may have had an average to long marriage to first birth interval.

Marital timing may have a significant effect, since early marriage has been linked to the DOUBLTRK pattern in a previous study (Elder and Rockwell, 1967). Because wives who worked continuously out of economic necessity surely outnumber wives who worked continuously for a career, less-educated women who married early are probably over-represented

in the DOUBLTRK pattern. Both early marriage and low wife's education should be associated with a increase in a woman's likelihood of being in the DOUBLTRK, rather than the INTERUP, pattern. Conversely, INTERUP wives probably delay marriage in favor of increased schooling; so late marriage and high wife's education should be related to an increased likelihood of being in the INTERUP group.

Previous research has confirmed that wives' employment is negatively related to husband's income, both permanent and transitory (Mincer, 1962, 1968; Rosenfeld and Perrella, 1965; Cain, 1966; Carter and Glick, 1970; Dickinson and Dickinson, 1973; Sobol, 1973). Because husband's education is used here as a proxy for his income, it may be a negatively related to the wife's probability of being in the DOUBLTRK pattern. The freedom to remain at home during childbearing may be partially due to the relatively high husbands' incomes (educations) among the INTERUP group of wives.

In addition, previous research has linked the DOUBLTRK pattern with rural origins (Elder and Rockwell, 1967). Other studies have found employment to be less frequent among rural wives (Sweet, 1972a; Chenoweth and Maret-Havens, 1978). Because as previously discussed (see p. 112), the conceptualization in the present analysis resembles that of the Elder and Rockwell research, we can expect to find here that rural origins significantly increase a woman's probability of being in the DOUBLTRK pattern, rather than in the INTERUP group.

There is no reason to believe that the remaining two variables, frequency of geographical mobility and marital mobility, will differentiate between the two employment patterns in this contrast. Although the perceived adequacy of husband's income may be a secondary inducement to the stage two work force withdrawal of INTERUP wives, the primary reason is probably their desire to remain at home with preschool children. Migration-induced employment instability is probably not a factor.

Employment after childbearing: work force reentry. The fifth model assesses the effects of family characteristics on a contrast of wives in the TRADITNL and INTERUP patterns. In addition to being employed during stage one, both patterns are characterized by nonemployment during the childbearing stage. INTERUP wives, however, return to continuous employment after childbearing, while TRADITNL wives remain permanently out of the work force. By contrasting these two employment patterns, the model should point out some of the inducements and facilitators of work force reentry following childbearing.

As in the first contrast (NEVEREMP/EMPLOYED), three reasons stand out as possible explanations for the return to the work force of the INTERUP group. First, economic necessity may induce reentry. The third stage is often characterized

by a financial squeeze, as growing children place an added strain on family resources.<sup>3</sup> If this were the case, one could expect INTERUP wives to be significantly lower than TRADITNL wives on husband's education. If wives return to work because they are dissatisfied with the standard of living provided by their husband's income, the marital mobility variable should be significant (i.e., wives' fathers' occupational prestige should be significantly more likely to exceed their husbands' in the INTERUP group than in the TRADITNL).

It has been suggested above that INTERUP wives may be a highly educated, career-oriented group who spaced their births closely in order to quickly return to permanent employment. In that case, economic factors may be unimportant and fertility-related factors may be the crucial ones. INTERUP wives may have had significantly fewer children and/or more closely spaced births than did wives in the TRADITNL group, as both factors would minimize the time lost at work and maximize the retention of skills and wage levels. The SPACEKID interaction may be significant in this contrast, as well. Wives with many children widely spaced would be even less likely to return to paid employment after childbearing than would wives with many children closely spaced.

Because the wives in both patterns are probably relatively well-educated (Young, 1978), wife's education should have no significant effect in this model. However, highly

educated wives may fall into two groups: those who bear fewer children more quickly in order to return to paid work, and those who do not thus control their fertility patterns and remain permanently at home after their first birth.<sup>4</sup>

Third, the return of INTERUP wives may have been facilitated by low residential mobility. By not having to relocate often, wives are better able to remain familiar with conditions in the local labor market and to maintain their job contacts. Therefore, wives in the INTERUP group should have experienced a significantly lower frequency of geographical mobility.

In addition to wife's education, the three remaining independent variables will probably be nonsignificant in this contrast. Since marital timing is related to educational attainment among women (Voss, 1975; Marini, 1978) and education is presumed not to differ significantly in the two groups, there is no reason to believe wives in the two patterns will differ much in terms of marital timing. Because both of these employment patterns are characterized by employment between marriage and first birth, the first life cycle stage is probably a long one for both groups (Young, 1978), and we would not expect the timing of first birth to be a significant factor in differentiating wives who returned to work after childbearing. Finally, because both groups are probably

characterized by high education, relatively late marriage and a long marriage/first birth interval, both groups of women are likely to be non-farm in origin.

Initial employment after childbearing. The final model assesses the effects of family characteristics on a contrast of wives in the MIDLIFE and NEVEREMP patterns. Both patterns are characterized by nonemployment during the first and second life cycle stages, but MIDLIFE wives enter the work force for the first time after the childbearing stage. By contrasting these two employment patterns, the model should indicate some of the inducements and facilitators of initial employment in mid-life.

Initial employment in mid-life may be related both to a third stage life cycle squeeze and to earlier fertility patterns. Household expenses increase as children grow older, enter high school and begin to prepare for future careers. If husband's income was insufficient to meet this growing family demand, wives who had not been employed previously may have entered the work force to supplement family income. Therefore, a low husband's education should be related to an increased probability of initial employment in mid-life.

The feasibility of wives' employment at this time may depend on her age when childbearing ends. Wives who were relatively young at the beginning of stage three were probably less reluctant to enter the work force and probably encountered



less difficulty in their job search efforts. Although a wife's age during a particular stage was not included in this analysis, fertility-related factors serve as an adequate measure of this dimension. Wives who married early, had a short marriage/first birth interval, and had fewer children, more closely spaced would have been younger than other wives when childbearing was over. Although not all of these variables may be simultaneously significant in predicting initial employment at mid-life, it is expected that EARLYMAR, SHORTINT and/or CLOSE (spacing) will be associated with an increase in wives' probability of being in the MIDLIFE group. TOTKIDS should have a negative effect on third stage employment, as well. Wife's education, farm/non-farm background and frequency of geographical mobility are not expected to be important in this model.

Table 5-1. Lifetime Employment Patterns of Married Women

	MARRIAGE	CHILDBEARING		LAST CHILD IS 3	N	% OF TOTAL	% OF EMPLOYED
		1ST BIRTH	LAST BIRTH				
NEVEREMP					226	14.88	----
TRADITHL					115	7.57	9.23
INTENUP					159	10.47	12.75
INOUTINT					27	1.78	2.17
DOCELTRK					81	5.33	6.50
DELDTRK					22	1.45	1.76
DTRKABL					30	1.98	2.41
DOTRKABL					48	3.16	3.85
MIDLIFE					169	11.13	13.55
ONEYEAR	(1)		(1)	(1)	21	1.38	1.68
INANDOUT					332	21.86	26.62
INOUTABL					242	15.93	19.41
Missing				Subtotal	1472	96.91	----
					47	3.09	----
				Total	1519	100.00	----

Table 5-2. Employment Pattern by Cohort

		<u>Cohort</u>		<u><math>\chi^2</math></u>	<u>Prob</u>
		<u>1923-29</u>	<u>1930-37</u>		
NEVEREMP	0	582 (85.09)	711 (85.15)	0.0001	0.9731
	1	107 (14.91)	124 (14.85)		
TRADITNL	0	635 (92.84)	769 (92.10)	0.295	0.5873
	1	49 (7.16)	66 (7.90)		
INTERUP	0	605 (88.45)	755 (90.42)	1.555	0.2124
	1	79 (11.55)	80 (9.58)		
INOUTINT	0	666 (97.37)	826 (98.92)	5.199	0.0226*
	1	18 (2.63)	9 (1.08)		
DOUBLTRK	0	651 (95.18)	787 (94.25)	0.636	0.4252
	1	33 (4.82)	48 (5.75)		
DELDTRK	0	671 (98.10)	818 (97.96)	0.036	0.8504
	1	13 (1.90)	17 (2.04)		
DTRKAB1	0	675 (98.68)	822 (98.44)	0.153	0.6956
	1	9 (1.32)	13 (1.56)		
DELDTRKO	0	657 (96.05)	814 (97.49)	2.521	0.1123
	1	27 (3.95)	21 (2.51)		
MIDLIFE	0	607 (88.74)	743 (88.98)	0.022	0.8827
	1	77 (11.26)	92 (11.02)		
ONEYEAR	0	672 (98.25)	826 (98.92)	1.262	0.2612
	1	12 (1.75)	0 (1.09)		
JGANDOUT	0	562 (87.16)	625 (74.85)	11.775	0.0006*
	1	122 (17.84)	210 (25.15)		
INOUTAB1	0	569 (83.19)	708 (84.79)	0.722	0.3956
	1	115 (16.81)	127 (15.21)		

Notes to Chapter V

<sup>1</sup>As stated on page 110, this study does not impute causality to either fertility-related variables or to employment.

<sup>2</sup>Labor market factors (i.e., a high unemployment rate, a low female industry mix, etc.) also may have prohibited DTRKAB1 wives from finding a job during the first life cycle stage. These variables, however, were not used in the present analysis (see pp. 79-80).

<sup>3</sup>The third life cycle stage in the present study is open-ended. That is, it encompasses wives in all stages beginning with the end of childbearing. Although some wives had no high school or college-aged children by 1974, many did have older children (see pp. 67 - 69) for further discussion of the life cycle stages used here).

<sup>4</sup>If, as suggested here, INTERUP wives return to work primarily to continue the pursuit of a career (i.e., wife's education is not significant but number and spacing of children are significant), INTERUP wives may not be significantly lower than TRADITNL wives on husband's education. Of course, both the need and desire to return to paid employment could exist jointly.

## CHAPTER VI

### RESULTS

#### Relationships Among the Independent Variables

The purpose of the present analysis is to estimate the effects of background and family-related characteristics on wives' lifetime employment patterns. The ten independent variables used include cohort (COHORT), farm/nonfarm background (FARM), wife's education (EDUC), husband's education (HUSBEDUC), marital timing (MARITAL), timing of first birth (TIMING), birth spacing (SPACING), number of children (TOTKIDS), marital mobility (FAHUSB) and frequency of geographical mobility (FREQMOB).

As can be seen in Table 6-1, multicollinearity is not a problem in the present analysis. The only explanatory variables that are highly correlated are husband's education and wife's education ( $r = .60$ ,  $p = .0001$ ). Both of these are retained in the models, in spite of their high correlation, because, as discussed earlier (see p. 85), the two education variables are used as measures of somewhat different phenomena.

From the correlations presented in Table 6-1, a profile can be drawn of the social and demographic changes occurring over the two birth cohorts. Members of the younger cohort

(born 1930-1937) are significantly less likely to have come from farm backgrounds than are members of the older cohort (born 1923-1929). In addition, younger wives have had more education than older wives and have more highly educated husbands.<sup>1</sup> Three of the four marital and fertility-related characteristics are significantly related to cohort, as well. Members of the younger cohort are more likely to have married early (17 years old or younger), to have had an early first birth (i.e., a short marriage/first birth interval), and to have spaced their births closely (less than two years between births). Although the marital timing/cohort and timing of first birth/cohort correlations are significant, they are very low ( $r_{51} = -.09$ ,  $r_{61} = -.07$ ). Number of children (TOTKIDS) is unrelated to cohort. That is, younger wives did not bear significantly more or fewer children than did older wives. Similarly, there is no correlation between marital mobility (FAHUSB) and COHORT. As might be expected, the propensity to marry out of one's own social class varies little over time. Although the correlation of the final variable (FREQMOB) with COHORT is low, it is a significant one. Younger wives experienced a higher frequency of long-distance residential mobility over their married lives than did older wives, probably because a larger proportion of the lives of older women was spent prior to the post-war expansion of high-mobility white-collar jobs.

### Employment Pattern Contrasts

As stated previously, the purpose of the present analysis is to estimate the effects of background and family-related characteristics on wives' lifetime employment patterns. The underlying assumption is that factors such as wife's education, marital timing, number and spacing of births and frequency of geographical mobility have different relationships to employment in the various life cycle stages. Therefore, various configurations of these characteristics should be associated with differing probabilities that a woman's lifetime employment followed one pattern rather than another.

Six models are estimated, each assessing the effects of family characteristics on a different contrast of employment patterns. Each contrast focuses on an issue central to our understanding of the dynamics of female employment.

- 1) In order to address the most general question of why wives work, the first model contrasts never-employed wives with wives who worked for pay at some point in the family life cycle.
- 2) The question of why most wives' employment is discontinuous in nature is addressed by contrasting wives who were employed continuously in the three early life cycle stages

with wives in and out of the work force  
in all three stages.

Four contrasts are used to investigate factors related  
to the dissimilarity in work patterns of ever-employed wives.

- 1) The first explores factors related to  
employment in stage one (i.e., before  
childbearing), by contrasting wives  
who worked in all three stages with  
wives employed in stages two and three.
- 2) The second investigates factors asso-  
ciated with employment in stage two  
(i.e., during childbearing), by con-  
trasting wives who worked in all three  
stages with wives employed in stages  
one and three.
- 3) The third analyzes factors associated  
with a return to the work force after  
childbearing by contrasting wives who  
worked only in stage one with wives  
employed in stages one and three.
- 4) The fourth investigates factors re-  
lated to initial employment in mid-  
life by contrasting never-employed  
wives with wives initially entering  
the work force in stage three.



Tables 6-2 through 6-6 present the results of these analyses. Each table includes both the logit coefficients and the predicted proportional change values. Each of these values represents the partial derivative of the mean of the dependent variable with respect to each  $x_b$ , and is interpreted as the percent change in the probability of being in the group coded one for a one unit change in the dependent variable.<sup>2</sup> Significant cohort interaction is indicated, where relevant, by separate cohort columns in the tables.

The independent variables are mostly dummy variables and were coded as follows.

- a) COHORT: Younger wives (born during the 1930's) were coded one; older wives (born during the 1920's) were coded zero.
- b) FARM: Wives with a farm background were coded one; wives with a nonfarm background were coded zero.
- c) LTHS: Wives with fewer than twelve years of schooling were coded one; wives with twelve years of schooling were coded zero.
- d) SOME COLL: Wives with 13-15 years of schooling were coded one; wives with twelve years of schooling were coded zero.
- e) COLLEGE: Wives with four or more years of college were coded one; wives with twelve years of schooling were coded zero.
- f) HELEM: Wives whose husbands had fewer than nine years of schooling were coded one;

wives whose husbands had twelve years of schooling were coded zero.

- g) HLTHS: Wives whose husbands had 9-13 years of schooling were coded one;  
wives whose husbands had twelve years of schooling were coded zero.
- h) HSOMECOL: Wives whose husbands had 13-15 years of schooling were coded one;  
wives whose husbands had twelve years of schooling were coded zero.
- i) HCOLLEGE: Wives whose husbands had completed four years of college were coded one;  
wives whose husbands had twelve years of schooling were coded zero.
- j) HGRADUTE: Wives whose husbands had completed more than four years of college were coded one;  
wives whose husbands had twelve years of schooling were coded zero.
- k) EARLYMAR: Wives who married early were coded one;  
wives who married on time were coded zero.
- l) LATEMAR: Wives who married late were coded one;  
wives who married on time were coded zero.
- m) SHORTINT: Wives who had a short marriage/first birth interval were coded one;  
wives who had an average marriage/first birth interval length were coded zero.
- n) LONGINT: Wives who had a long marriage/first birth interval were coded one;

wives who had an average marriage/ first birth interval length were coded zero.

- o) CLOSE: Wives who had spaced their births closely were coded one; wives who had average birth spacing were coded zero.
- p) WIDE: Wives who had spaced their births widely were coded one; wives who had average birth spacing were coded zero.
- q) TOTKIDS: A continuous variable representing the total number of children ever residing with the respondent.
- r) FAGTHUSB: Wives whose fathers' occupational prestige exceeded their husbands' were coded one; wives whose fathers' occupational prestige was in the same range as their husbands' were coded zero.
- s) HUSBGTFA: Wives whose husbands' occupational prestige exceeded their fathers' were coded one; wives whose husbands' occupational prestige was in the same range as their fathers' were coded zero.
- t) FREQMOB: A continuous variable representing the respondent's frequency of geographical mobility between the time she completed school and 1974.

### Employed Wives

The question of what motivates married women to work outside of the home has long been a topic of social scientific research. Inducements and facilitators such as husband's income and number of children have been linked to wives' employment; but employment usually had been measured at one point

in time (i.e., during the survey week) and used as a proxy for the lifetime employment process. Because many nonemployed women may have worked in the past, or will work in the future, this measure of employment underestimates the number of wives who work at some point in the life cycle.<sup>4</sup>

The first model in the present analysis estimates the effects of the independent variables on a contrast of wives never and ever-employed over the first three stages of the family life cycle. As such, it taps work in all stages and provides a more reliable answer to the question of why most married women were employed. Ever-employed wives were coded one on the dependent variable so the predicted proportional change effects in Table 6-2 represent changes in the probability of being ever-employed for unit changes in each independent variable, evaluated at the mean of the contrast.

Although economic, fertility and migration variables were all expected to substantially affect wives' employment; overall, it appears that fertility-related factors are the most important in differentiating never and ever-employed wives. As can be seen in Table 6-2, this was especially true among the younger cohort. Younger wives were significantly less likely to have been ever-employed if they married late and/or if they had a short marriage/first birth interval. Each additional child is associated with a decrease in wife's likelihood of having been ever-employed, among both cohorts.

Previous research has found wives; employment to be positively related to both early and late marriage, and it was expected that the present results would lend support to those findings. Yet neither a late nor an early marriage is associated with an increase in the likelihood of employment among the wives in these data. The decreased probability of employment among younger wives who married late may be due to an over-representation of Catholics among late marriers (Bumpass, 1969). Catholic wives tend to have large families, and a large family begun later in life would certainly exert an inhibitory effect on employment. Unfortunately, respondent's religious affiliation was not available in these data.

Other studies have indicated that a short marriage/first birth interval is related to nonemployment during that interval; and in the present analysis, a short first interval is related to a lesser likelihood of being ever-employed. Although wives do remain nonemployed when their first birth comes early, wives do not delay their first birth for a long period after marriage in order to work outside of the home. Previous research has found a positive relationship between employment and age at first birth (e.g., Waite and Spitze, 1978), but the effect of a long marriage/first birth interval (LONGINT) on employment is non-significant here. The present findings suggest that

the relationship between employment and age at first birth is a function of the positive effect of age at marriage on employment.

Cogan and Berger (1978) found that both the number of children a women had and the length of her birth intervals were negatively related to her years of work experience. The present model, contrasting no work experience with some work experience, finds support for the former finding, but not for the latter. Cogan and Berger also found significant interaction between number and spacing of children; such that the greater the number of children, the greater the negative effect of wide spacing on lifetime work experience. Although we expected to find such interaction in the present model, neither the CLOSEKID nor the WIDEKID effect was statistically significant. As indicated in Table 6-2, number of children has a consistently negative effect on employment, regardless of how those births were spaced.

Although it was expected that low education and downward marital mobility would be related to the NEVEREMP pattern, none of the economic factors have a consistent effect on wives' employment. The only two significant education effects suggest that younger wives tended to work when husband's education (i.e., income) was high and that older wives tended to work when their own education (i.e., potential wage) was low. These results may be a function

of the relatively high correlation between wife's and husband's education. It may be that younger wives with college-educated husbands were more likely to be employed because they were highly educated, as well. Older wives may have been more likely to be employed when their own potential wages were low because their husbands' incomes were comparably low. A comparison of these relationships among the older and younger wives suggests a change in wives' motivation to work may have taken place across cohorts. Among the older cohort, economic necessity was probably the only acceptable justification for wives' employment and working class women most likely comprised the majority of employed wives. By the time the younger cohort reached maturity, the social climate was changing and, with the rapid expansion of white collar jobs, female employment was becoming a more acceptable middle class phenomenon. The effect of downward marital mobility (FAGTHUSB) is significant only among the younger cohort, and the effect is not in the expected direction. That is, younger wives who experienced downward marital mobility were significantly more likely to have been never-employed than they were to have worked.

The final factor related to the probability of employment is farm/nonfarm background. Some previous research has indicated that, overall, women residing in rural areas are

less likely to be employed than are urban women, because the former tend to have fewer years of schooling and there is usually less demand for female labor in rural areas.<sup>5</sup> Other research has linked rural origins to both early marriage and employment. Because the variable used in the present study taps origins, rather than areas of present residence, it was expected that the present results would lend support to the latter finding. Such is indeed the case among the younger cohort. That is, the probability of having been ever-employed is significantly increased among younger wives with a farm background.

Residential migration has been linked with wives' employment discontinuity in other studies and it was expected that a high frequency of geographical mobility would be related to the NEVEREMP pattern in this contrast. As can be seen in Table 6-2, FREQMOB is not significant among either cohort. Wives in highly mobile families were as likely to be ever-employed as were other wives.

Summary. Because the effects on wives' employment of farm/nonfarm background and late marriage differed significantly by cohort, separate models were estimated for the older and younger wives. As a group, the fertility-related variables were the most consistently related to wives' employment. In fact, the only generalization that can be made across cohorts is that the number of children a wife bears



has a significant negative impact on her probability of employment. In both cohorts, each additional child was associated with a decrease of almost three percent in a wife's probability of having been ever-employed, regardless of how these births were spaced. Among the older cohort, a wife's likelihood of having been ever-employed was decreased additionally if she had less than twelve years of education. Older wives, then, tended not to work when they had a large number of children and/or when their education (i.e., their potential wage) was low. Among the younger cohort, a wife's likelihood of having been ever-employed was significantly increased if she had a farm background and decreased if her husband was a college graduate, if she married late, and/or if her marriage/first birth interval was a short one. Younger wives tended not to work when they had a large number of children, when their husband's education (i.e., income) was high, when marriage (and thus, childbearing) was begun late in life, and/or when childbirth followed quickly after marriage.<sup>6</sup>

#### Discontinuous Workers

As was seen in the typology discussed in Chapter V, discontinuous employment is the norm among married women. Although it has been found that residential migration tends to break the continuity of wives' employment (Long, 1974),

and that female employment discontinuity is one factor related to the disparity in male/female wage rates, there has yet to be done a comprehensive analysis of the factors inducing this discontinuity.

The next model addresses this problem by estimating the effects of family characteristics on a contrast of wives continuously employed over the first three life cycle stages with those who were in and out of the work force in each stage. INANDOUT wives were coded one on the dependent variable, so the predicted proportional change effects in Table 6-3 represent changes in the probability of discontinuous employment for unit changes in each independent variable, evaluated at the mean of the contrast. As can be seen in the table, separate models for the younger and older cohorts were again necessitated, this time by the significant interaction of COHORT and SHORTINT (short marriage/first birth interval).

Wives' probability of continuous employment seems to be influenced predominantly by two factors: number of children and frequency of geographical mobility. These variables are the only two significant across cohorts and, especially in the case of frequency of mobility, the effects are quite strong.

Number of children has been found to have a negative effect on almost all measures of employment, and the present findings prove no different. Among the younger cohort, each

additional child is associated with a six percent decrease in the probability of continuous employment (or a six percent increase in the probability of discontinuous employment), regardless of how these births are spaced. Among older wives, number and spacing of births interact in the following way.<sup>7</sup> Older wives who spaced their births 2-4 years apart are, for each additional child, 8.6 percent less likely to have worked continuously and (8.6 percent more likely to have worked discontinuously) over the first three life cycle stages. This negative effect for the older wives' average spacing group corresponds both to the overall effect among younger wives and to the results of previous studies of wives' employment. Older wives who had spaced their births either closely (i.e., less than two years apart) or widely (i.e., more than 4 years apart) were more likely, with each additional child, to have been continuously employed. As can be seen in Table 6-3, the effects of number of children, closely and widely spaced, reflect substantial increases in magnitude, as well as a change in direction. However, a reexamination of the data showed that those older wives who spaced their births either closely or widely tended to have few children. The relationships between number of children and older wives' employment continuity, at each level of spacing, are plotted in Figure 6-1. In this diagram, the regions encompassing the majority of respondents are

represented by the solid lines. Older wives were more likely to have been continuously employed when they spaced their births closely or widely because these same women had few children. Number of children was an important factor in wives' employment (see Table 6-2), and it seems to be the crucial fertility-related factor in employment continuity, as well.

Several studies have found that residential migration has a great disruptive effect on wives' employment continuity (Long, 1974; Duncan and Perrucci, 1976) and the results of the present analysis support those previous findings. Wives who made frequent long-distance moves were significantly less likely to have been employed continuously since marriage. Each successive change in residence is associated with a fifteen percent increase in younger wives' probability of having had a discontinuous worklife. For older wives, each move is associated with a twenty-two percent increase in the probability of having been discontinuously employed. Although both effects are statistically significant, the negative effect of migration on employment is stronger among the older cohort. Perhaps as the employment of married women became more acceptable and jobs easier to find, wives became better able to maintain employment after a long-distance move.

It was expected that neither economic factors nor farm/nonfarm background would be related to wives' employment

continuity, and in general, no relationship was found between this dependent variable and either wife's or husband's education. If wife's education was a reasonable measure of her employability and/or her potential wage, then neither of these factors seems to be responsible for the discontinuity of most wives' employment.

One unexpected result is the significant effect of farm/nonfarm background among younger wives. Ever-employed younger wives with farm origins are significantly more likely to have been continuous workers than were their urban counterparts. This rural/urban variable reflects the character of the respondent's residence at age fifteen, rather than their type of marital residence, and it is unclear why wives who were raised, for the most part, in cities were more likely to be employed discontinuously after marriage. To the extent that urban-born women resided in urban areas (and rural-born women in rural areas) after marriage, it may be that employment discontinuity is related to job and child care factors in the two settings. That is, it may be that urban residence was more conducive to temporary employment in that temporary jobs were more readily available and inexpensive, long-term child care more difficult to obtain. In rural areas, on the other hand, wives' permanent employment may have been facilitated by the greater likelihood of having nearby relatives to provide such care.

Summary. Because the effects on wives' employment continuity of having had a short marriage/first birth interval differed significantly by cohort, separate models were estimated for older and younger wives. However, two generalizations can be made across cohorts regarding employment continuity. One is that the higher the frequency of geographical mobility, the lower the probability that wives will remain continuously employed. The second is that the greater the number of children, the lower the probability that wives will remain continuously employed. The older wives most likely to have been employed discontinuously were those who had made frequent long-distance moves and those who had had several children an average of two to four years apart.<sup>8</sup> The younger wives most likely to have been employed discontinuously were those who had moved frequently, those who had had several children (regardless of their birth spacing), and those who had non-farm backgrounds.

#### Life Cycle Employment Patterns

The employment pattern contrast analyzed in the previous model compared wives who were in and out of work force during every life cycle stage to wives continuously employed during each stage. However, many wives remained at home during one or two stages and were continuously employed during others. When viewed over the life cycle, these intervals of employment and nonemployment form lifetime work patterns.

Models which assess the effects of family characteristics on contrasts of these patterns can give us some insight into why the work patterns of ever-employed wives vary as they do.

Although there are probably several ways to approach this question, the contrasts analyzed here were chosen in order to explain employment during each of the three early life cycle stages. That is, the models contrast wives employed before, during and after the childbearing stage. Because the employment patterns in each contrast differ only by employment during one interval, the effects can be viewed as inducements and/or facilitators of employment during that life cycle stage.

Employment before childbearing. The first model in the present group contrasts wives employed continuously during all stages (DOUBLTRK) with wives employed continuously only during stages two and three (DTRKAB1). Thus, the two patterns differ only by employment during stage one (i.e., before childbearing). Because DOUBLTRK wives were coded one on this contrast, the effects in Table 6-4 indicate some of the factors related to employment before childbearing. As can be seen in the table, the significant interaction of COHORT and SHORTINT (short marriage/first birth interval) necessitated the estimation of separate models for the younger and older wives.

Because other research has found the length of the first life cycle interval to be positively related to employment during that interval (Young, 1978), it was expected that this variable would be significant in the present model. The length of the marriage/first birth interval (SHORTINT, LONGINT) is, in fact, the only factor having a significant effect on first stage employment in both cohorts. Younger wives who had a short marriage/first birth interval are sixty percent less likely than other wives to have worked before childbearing. Older wives who had a long marriage/first birth interval are sixty-six percent more likely than other wives to have worked before childbearing.

Economic factors have virtually no effect on wives' first stage employment. The only significant effect, for older wives with a college education, indicates that these wives are fifty-six percent less likely than other wives to have been employed before childbearing. Nonemployment in early life cycle stages often has been related to continued nonemployment, and as indicated in Table 6-2, for the previous contrast, older college-educated wives tended never to be employed.<sup>9</sup>

The only other variable significantly nonzero is frequency of geographical mobility among the younger wives. Each successive long-distance move is associated with a



thirty-one percent decrease in younger wives' probability of first stage employment.

In summary, the only factor related to wives' employment before childbearing across cohorts, was the length of the interval between marriage and first birth. Both a short first life cycle interval and frequent geographical mobility were associated with a decrease in younger wives' probability of first stage employment. Among older wives, a long first life cycle interval was associated with an increased probability of first stage employment, while having had four or more years of college was associated with a decreased probability of first stage employment.

Employment during childbearing. The second model in the present group contrasts wives employed continuously during all stages (DOUBLTRK) with wives employed continuously only during stages one and three (INTERUP). The two patterns differ only in regards to employment during stage two (i.e., the childbearing stage). Because DOUBLTRK wives were coded one on this contrast, the effects in Table 6-5 indicate some of the factors related to employment during the childbearing stage. As can be seen in the table, the significant interaction of COHORT and SHORTINT again necessitated the estimation of separate cohort models. Unlike the previous models, no one factor or group of factors seems to operate across cohorts to induce employment during the childbearing stage.

Among the younger wives, both economic factors and fertility-related variables are significant. Those associated with the greatest change in their likelihood of second stage employment are a very high value on husband's education and downward marital mobility. Younger wives whose husbands had some graduate education are forty-four percent less likely to have worked continuously in stage two. Younger wives who had experienced downward marital mobility are thirty-one percent more likely than other wives to have been employed during childbearing.

Close birth spacing is also a significant predictor of younger wives' second stage employment, although its effect is somewhat weaker than those of the economic variables. Younger wives who had spaced their births closely are twenty-seven percent less likely than other wives to have been employed during childbearing. It may be that wives with closely spaced births were unable to work in this stage due to their large inputs of time to childbirth and the care of small children. Alternatively, it may be that this relationship reflects a role management strategy of accelerating the pace of childbearing in order to minimize the length of the childbearing stage. Thus, many INTERUP wives may be as career-oriented as wives in the DOUBLTRK group. Although this model was not meant to imply causal direction, the latter explanation gains support if one

reexamines the education effects. Wives in these two employment patterns do not differ significantly in educational level. Regardless of whether wife's education taps her employability, potential wage or taste for work, INTERUP wives in the younger cohort are as likely to have a high value on this variable as are DOUBLTRK wives. In addition, younger wives whose husbands are highly educated are more likely to have followed the INTERUP pattern. Perhaps when husband's income made it economically feasible, career-oriented wives in the younger cohort tended to remain at home during their childbearing years, dispense with childbearing quickly, and return to work.

The final factor related to second stage employment among the younger cohort is frequency of geographical mobility. Although residential migration inhibits wives' employment during both the first and second stages (see Tables 6-3, and 6-4), the effect is weaker during the second stage. Each successive long-distance move decreases younger wives' probability of employment during childbearing by twenty-four percent.

Neither marital timing nor farm/nonfarm background has its expected effect on younger wives' employment during childbearing. The DOUBLTRK wives in this cohort did not marry significantly earlier than the INTERUP wives, and are no more likely to be rural in origins.

This model is not a good one for predicting the likelihood of older wives' second stage employment. Although it was expected that the length of the marriage/first birth interval would be unrelated to second stage employment, SHORTINT is associated with a fifty-eight percent increase in wives' likelihood of employment during childbearing. A short marriage/first birth interval usually is related to nonemployment in stage one; yet all the wives in this contrast worked during that stage. This result implies that older wives who had a short interval before first birth and who worked during that stage, in spite of its brevity, also tended to continue working after first birth.

None of the other variables are significant among the older cohort, although it was expected that number of children, birth spacing, marital timing, husband's education and farm/nonfarm background would all exert some influence on second stage employment. Older wives who were employed during stage one seem to be equally likely to have been employed and not employed during stage two, regardless of their background and family characteristics.

In summary, employment during the childbearing stage can be attributed to no one factor or group of factors for all wives. The variables included in the present model were much more useful in predicting second stage employment among the younger cohort than they were for the older cohort. The economic factors (husband's education and marital mobility)

had the strongest effects among younger wives, followed by birth spacing and geographical mobility. A highly educated husband, a high frequency of geographical mobility and close birth spacing were all associated with a decrease in younger wives' probability of employment during childbearing. Downward marital mobility was associated with an increase in younger wives' probability of second stage employment. Among older wives, a short interval between marriage and first birth was associated with an increase in the probability of employment during childbearing. It was suggested that older wives who had a short first stage and yet worked during that stage, were more likely to continue their employment through childbearing than were other wives employed in stage one.

Work force reentry after childbearing. The third model in this group contrasts wives employed continuously during stages one and three (INTERUP) with wives employed only during stage one (TRADITNL). Wives in both employment patterns were absent from the work force for the entire childbearing stage. While this withdrawal was a permanent one for the TRADITNL group, INTERUP wives returned to paid employment at some time following the end of childbearing. Because INTERUP wives were coded one on this contrast, the effects in Table 6-6 indicate some of the factors related to work force reentry after childbearing. Because there were no

significant cohort interactions in this model, the single column of coefficients in the table is applicable to all wives.

As can be seen in Table 6-6, marital and fertility-related factors are almost the only significant predictors of work force reentry after childbearing. Although marital timing was not expected to affect employment after childbearing, a late marriage is associated with a twenty-three percent decrease in wives' probability of third stage employment. Of the wives employed before, but not during childbearing, those who married late are significantly more likely than other wives to have remained at home permanently. Number of children is significantly related to wives' probability of work force reentry, as well, and this relationship varies, in direction and intensity, depending on how those births were spaced. For wives who had spaced their births an average of 2-4 years apart, each additional child is associated with a nine percent decrease in the probability of work force reentry. For wives who had spaced their births closely (less than 2 years apart), or widely (more than 4 years apart), each additional child is associated with a seventeen percent or a seven percent increase, respectively, in the probability of work force reentry. It should be noted that wives who had spaced their births closely or widely also tended to have only two children. Thus, wives who spaced their births closely or widely were

able to return to paid employment partly because they had few children. The relationships between third stage employment and TOTKIDS, at each level of birth spacing, are plotted in Figure 6-2. The regions encompassing the majority of respondents are represented by solid lines, which when combined with the dotted-line extensions, represent the equations as a whole.

Although it was suggested that work force reentry may be related to the inability of husband's income to meet family need, none of the economic variables are significant here. One might argue justifiably that husband's education is a measure of his absolute income, rather than of his income adequacy and that its lack of significance in the present model is meaningless. Yet if income inadequacy is related to work force reentry and INTERUP wives are no more likely than TRADITNL wives to have low-income husbands, then they should have a significantly greater number of children.<sup>10</sup> As discussed in the previous paragraph, such is not the case. TRADITNL wives, in fact, tend to have the greater number of children. Therefore, economic factors, such as permanent income and potential wage, are not important in predicting work force reentry after childbearing.<sup>11</sup>

The only other variable significant in this model is COHORT. Of the wives who worked before, but not during childbearing, older wives are more likely than younger wives

to have returned to paid employment in stage three. Although it was expected that the work force reentry of INTERUP wives may have been facilitated by low residential mobility, FREQMOB is nonsignificant in this contrast. Wives who permanently withdrew from the work force after first birth did not experience a higher frequency of geographical mobility than did wives who withdrew and returned.

In summary, a late marriage was related to a decreased probability of work force reentry after childbearing. If children were spaced 2-4 years apart, each new birth was associated with an additional decrease in this probability. Wives who spaced their births less than 2 or more than 4 years apart were likely to return to paid employment after childbearing, partly because these wives had few children. These fertility-related factors, rather than the economic factors, were the significant ones in predicting third stage employment among wives employed previously in stage one.

Initial employment after childbearing. Because work force reentry may be related to different factors than is initial employment in mid-life, a separate contrast is used to analyze the latter type of third stage employment. The final model in this group contrasts wives who entered the work force for the first time during the third life cycle stage (MIDLIFE) with wives who were never employed over the three stages (NEVEREMP). Because MIDLIFE wives were coded



one on this contrast, the effects in Table 6-7 indicate some of the factors related to initial employment after childbearing. As can be seen in the table, the significant interaction of COHORT with three of the independent variables (COLLEGE, LATEMAR and TOTKIDS), necessitated the estimation of separate models for the younger and older wives.

The most important point to note in Table 6-7 is that the same relationships appear here for the younger cohort as appeared in the previous contrast. One set of factors is related to younger wives' third stage employment, regardless of whether that employment represents a return to the work force or an initial entry. However, only one factor is related to older wives' initial employment in mid-life, and it is not one of those which had been associated with work force reentry in stage three.

Although it was expected that both fertility patterns and economic factors would be related to initial employment in mid-life, fertility-related variables are the only significant ones among the younger cohort. In fact, their effects are consistently stronger in this model than they were in the previous model. For example, younger wives who married late are sixty-four percent less likely to have been employed after childbearing when they were never previously employed, and are twenty-three percent less likely to have been employed after childbearing when they had been employed before

childbearing (see Table 6-6). This difference probably reflects the higher motivation to work of previously employed wives. Although the interaction of birth spacing and number of children was not significant in this contrast, the spacing and number of children effects are similar to those in the previous model. Each additional child is associated with a twelve percent decrease in younger wives' probability of initial employment after childbearing. When her births were closely spaced, a younger wife is twenty percent more likely to enter paid employment in stage three.

This model functions poorly in predicting initial employment in stage three among older wives. None of the expected relationships appears. The only significant variable indicates that older wives with less than twelve years of schooling were thirty-two percent less likely to have entered the work force for the first time after childbearing. Although wife's education was not expected to be important in this contrast, older wives with little education tended to remain never-employed.

In summary, the three fertility-related variables which proved to be related to initial employment after childbearing were the same factors associated with work force re-entry in that stage among the younger cohort. For older wives, fertility-related variables were not related to initial employment in mid-life. Only one variable was

significant and it confirmed our earlier finding that older wives with little education tended to remain never-employed.

### Summary of Findings

The models estimated here each addressed a different aspect of wives' employment. The first contrasted wives never and ever-employed over the first three life cycle stages. Fertility-related variables were found to be those most consistently related to wives' employment. Across cohorts, number of children was negatively related to wives' probability of employment. Both younger and older wives tended to be never-employed when they had a large number of children. In addition, older wives tended to be never-employed when their education (i.e., their potential wage) was low, and younger wives tended to be never-employed when their husband's education (i.e., income) was high, when marriage came relatively late in life, and/or when child-birth followed quickly after marriage.

The second model was concerned with employment continuity and contrasted wives continuously and discontinuously employed over the first three life cycle stages. The two factors consistently related to employment continuity were number of children and frequency of geographical mobility. Older wives tended to be employed discontinuously when they had several children and when they had experienced a high frequency of residential migration. In addition,

younger wives tended to be employed discontinuously when they had non-farm backgrounds.

The third model addressed employment before childbearing and contrasted wives employed in all stages with wives employed in stages two and three. The length of the marriage/first birth interval was the only variable related to employment before childbearing in both cohorts. Younger wives were less likely to have worked in stage one if they had a short first life cycle interval and/or frequent geographical mobility. Older wives were less likely to have been employed before childbearing if they were college-educated, and were more likely to have been employed before childbearing if their first stage was a relatively long one.

The fourth model was concerned with employment during childbearing and contrasted wives employed in all stages with wives employed in stages one and three. No generalizations could be made across cohorts regarding employment during childbearing. For younger wives, economic factors were those most strongly related to second stage employment. Younger wives were more likely to have been employed during childbearing if they had been downwardly mobile through marriage and were less likely to be employed during stage two if their husbands were highly educated, if they had experienced a high frequency of migration, and if their births were closely spaced. Older wives' probability of employment

during childbearing was significantly increased only when their marriage/first birth interval had been a short one.

The fifth and sixth models addressed employment after childbearing. The fifth was concerned with work force re-entry in that stage and contrasted wives employed during stages one and three with wives employed only during stage one. The sixth was concerned with initial employment in mid-life and contrasted never-employed wives with wives who entered the work force for the first time after childbearing. Among the younger cohort, the same marital and fertility-related factors were associated with third stage employment, regardless of whether that employment represented a return to the work force or an initial entry. Younger wives tended not to be employed after childbearing if they had married late, and/or if they had several children. Although marital timing and number of children were negatively related to older wives' probability of work force reentry, the initial employment after childbearing of older wives was associated only with a low wife's education. Older wives with less than twelve years of schooling tended to remain never-employed.

Two general observations can be made regarding these results. One point concerns the importance of fertility-related variables in all aspects of wives' employment. In both cohorts, number of children was related to the probability of being ever-employed, the probability of discontinuous

employment and the probability of work force reentry after childbearing. It was associated with other aspects of employment in the individual cohorts, as well. The length of the marriage/first birth interval (i.e., timing of first birth) was consistently related to wives' probability of being employed before childbearing, while marital timing was related to third stage work force reentry for all wives. Birth spacing was the least important of the fertility-related group.

A final point concerns the relative unimportance of socioeconomic and background characteristics. Although economic variables were those most closely related to younger wives' employment during childbearing, none of those variables were consistently related to any aspect of wives' employment. Husband's education and farm/non-farm background were occasionally significant only among the younger cohort. Wife's education was significant in several models, but only among older wives. Frequency of geographical mobility was strongly and consistently related to employment continuity, but its effect on other aspects of employment was either nonsignificant or inconsistent across cohorts. The implications of these and other points will be addressed in Chapter VII.

Notes to Chapter VI

<sup>1</sup>The fact that husband's education is more highly correlated with birth cohort than is wife's education probably signifies the greater educational gains made by men following World War Two.

<sup>2</sup>The partial derivatives of the means of the dependent variables were computed using the formula  $B[P(1 - P)]$ , where B is the logit coefficient for a particular independent variable and P is the mean of the dependent variable contrast.

<sup>3</sup>Because in some employment patterns there were no wives with less than nine years of education and/or no wives with a graduate education, all wives who did have one of these two values on education were combined with wives in the nearest educational level (less than nine years of schooling was combined with less than twelve years of schooling and a graduate education was combined with four years of college) to provide some uniformity in the independent variables across models.

<sup>4</sup>This underestimation is probably most severe among younger wives, who tend to enter and leave the work force frequently in response to family needs and the demands of childbearing.

<sup>5</sup>Both education and the demand for female labor are correlated with wives' employment (Bowen and Finegan, 1969; Sweet, 1972a; Ross, 1974; Scanzoni, 1975; Chenoweth and Maret-Havens, 1978; Smith-Lovin and Tickamyer, 1978).

<sup>6</sup>In most of the contrasts, a larger number of effects attained significance among the younger cohort. This occurred because the sample size was almost always larger for the younger cohort.

<sup>7</sup>When an interaction is comprised of the effects of a continuous and a categorical variable, the separate effects are derived from the overall equation in the following way. The overall effect for the continuous variable represents the continuous variable effect for the group coded zero on the categorical variable. The continuous variable effect

for the group coded one on the categorical variable is obtained by computing the difference between the overall effect for the continuous variable and the interaction effect. Similarly, the intercept from the overall equation represents the intercept for the group coded zero, and the intercept for the group coded one is equal to the difference between the overall intercept and the effect for the categorical variable. Because the SPACEKID interactions were comprised of continuous (TOTKIDS) and categorical (CLOSE,WIDE) variables, the separate intercepts and TOTKIDS effects were computed using the method described above. In the present model, wives with close spacing were coded one on CLOSE, while wives with wide spacing were coded one on WIDE. Wives with average spacing were coded zero on both variables. Therefore, the overall intercept (-1.818) and the overall TOTKIDS effect (.433) among older wives are the intercept and TOTKIDS effect for the average spacing group. The intercept for older wives with close spacing (6.884) reflects the difference between the overall effect for close spacing (5.066) and the intercept for the average spacing group (-1.818). The TOTKIDS effect for older wives with close spacing (-2.235) reflects the difference between the CLOSEKID interaction effect (-1.802) and the TOTKIDS effect for the average spacing group (.433). The intercept for older wives with wide spacing (6.071) reflects the difference between the overall effect for wide spacing (4.253) and the intercept for the average spacing group (-1.818). The TOTKIDS effect for older wives with wide spacing (-1.205) reflects the difference between the WIDEKID effect (-.722) and the TOTKIDS effect for the average spacing group (.433).

<sup>8</sup> It should be noted that having several children spaced 2-4 years apart was the norm for this cohort. As this fertility pattern becomes less the norm, perhaps wives' employment is becoming increasingly continuous.

<sup>9</sup> Although this effect does not achieve the .05 level of significance in the NEVEREMP/EMPLOYED contrast, the coefficient is only slightly less than twice its standard error.

<sup>10</sup> This argument assumes that number of children/husband's income is a reliable measure of income adequacy.

<sup>11</sup> Transitory factors, such as low income in one year, may be important in modeling wives' employment after childbearing. Such variables are not included in the present



analysis because of both the difficulty of matching the years of wife's employment with husband's income in those years and the nonavailability of husband's income variables for the years prior to 1966 (see p.79 for further discussion of this problem).

<sup>12</sup>This result was found in the first contrast, as well (see Table 6-2).

Table 6-1. Correlations Among Independent Variables (Significance Levels in Parentheses)

	COHORT	FARM	EDUC	HUSBEDUC	MARITAL	TIMING	SPACING	TOTKIDS	FAHUSB	FREQMOB
COHORT	1.000 (.0000)	----	----	----	----	----	----	----	----	----
FARM	-0.076 (.0037)	1.000 (.0000)	----	----	----	----	----	----	----	----
EDUC	0.135 (.0001)	-0.146 (.0001)	1.000 (.0000)	----	----	----	----	----	----	----
HUSBEDUC	0.173 (.0001)	-0.175 (.0001)	0.600 (.0001)	1.000 (.0000)	----	----	----	----	----	----
MARITAL	-0.093 (.0004)	-0.075 (.0043)	0.254 (.0001)	0.247 (.0001)	1.000 (.0000)	----	----	----	----	----
TIMING	-0.067 (.0113)	0.025 (.3360)	0.045 (.0899)	0.067 (.0130)	-0.028 (.2908)	1.000 (.0000)	----	----	----	----
SPACING	-0.263 (.0001)	0.045 (.0872)	-0.177 (.0001)	-0.184 (.0001)	-0.193 (.0001)	-0.027 (.3027)	1.000 (.0000)	----	----	----
TOTKIDS	-0.021 (.4156)	0.056 (.0323)	-0.121 (.0001)	-0.067 (.0127)	-0.075 (.0043)	-0.272 (.0001)	-0.101 (.0001)	1.000 (.0000)	----	----
FAHUSB	0.047 (.0754)	-0.153 (.0001)	-0.047 (.0738)	-0.179 (.0001)	0.011 (.6849)	-0.030 (.2482)	-0.038 (.1578)	-0.000 (.9555)	1.000 (.0000)	----
FREQMOB	0.056 (.0346)	-0.034 (.1939)	0.063 (.0170)	0.144 (.0001)	0.048 (.0699)	0.032 (.2195)	-0.073 (.0058)	0.014 (.5962)	0.023 (.3770)	1.000 (.0000)

Table 6-2. Logit Coefficients for the Contrast of Never-employed and Ever-employed Wives (standard errors in parentheses)

1 = Ever-employed 0 = Never-employed				
	Younger Cohort (N = 807) (P = .154)		Older Cohort (N = 644) (P = .158)	
	Logit Coeff.	Pred. Prop. Change	Logit Coeff.	Pred. Prop. Change
Constant	2.948	----	2.990	----
FARM**	.837* (.327)	.109	-.045 (.266)	-.006
LTHS	-.294 (.312)	-.038	-.740* (.284)	-.099
SOMECOLL	-.305 (.326)	-.032	.018 (.412)	.002
COLLEGE	.698 (.386)	.091	1.001 (.577)	.133
HELEM	-.156 (.397)	-.020	.416 (.355)	.056
HLTHS	.061 (.366)	.008	.051 (.322)	.007
HSOMECOL	.175 (.375)	.023	.016 (.402)	.002
HCOLLEGE	-.693* (.331)	-.090	.216 (.502)	.029
HGRADUTE	-.448 (.394)	-.058	-.172 (.500)	-.023
EARLYMAR	.483 (.358)	.063	.319 (.361)	.043
LATEMAR**	-1.605* (.294)	-.209	-.280 (.328)	-.037
SHORTINT	-.586* (.231)	-.076	-.384 (.264)	-.051
LONGINT	.002 (.332)	.000	-.225 (.302)	-.030
CLOSE	----	----	----	----
WIDE	----	----	----	----
TOTKIDS	-.207 (.065)	-.027	-.206* (.057)	-.028
FAGTHUSB	-.574* (.285)	-.075	-.385 (.358)	-.051
HUSBGTFB	-.126 (.263)	-.016	-.424 (.268)	-.057
FREQJOB	.063 (.167)	.008	-.021 (.226)	-.003

\* Logit coefficient significant at .05 level or above

\*\* cohort interaction significant

Table 6-3. Logit Coefficients for the Contrast of DOUBLTRK and INANDOUT Wives (standard errors in parentheses)

1 = INANDOUT 0 = DOUBLTRK				
	Younger Cohort (N = 275) (P = .236)		Older Cohort (N = 168) (P = .274)	
	Logit Coeff.	Pred. Prop. Change	Logit Coeff.	Pred. Prop. Change
Constant	.068	----		
CLOSE			6.684	----
AVERAGE			-1.818	----
WIDE			6.071	----
FARM	-.806* (.365)	-.146	.272 (.547)	.054
LTHS	.346 (.537)	.062	.517 (.651)	.103
SOMECOLL	-.813 (.536)	-.147	.496 (.772)	.099
COLLEGE	-.805 (.506)	-.145	-.579 (.707)	-.115
HELEM	.148 (.728)	.027	.347 (.639)	.069
HLTHS	-.701 (.533)	-.127	-.737 (.624)	-.147
HSOMECOL	-1.098* (.475)	-.198	.487 (.923)	.097
HCOLLEGE	.193 (.591)	.035	.966 (.975)	.192
HGRADUTE	.810 (.726)	.146	.600 (.855)	.024
EARLYMAR	-.247 (.508)	-.045	-1.425 (.856)	-.233
LATEMAR	-.017 (.654)	-.003	-.344 (.672)	-.068
SHORTINT**	.709 (.468)	.128	-.951 (.640)	-.189
LONGINT	-.201 (.382)	-.036	-.281 (.517)	-.056
CLOSE	-.021 (.405)	-.004	----	----
WIDE	.314 (.515)	.057	----	----
TOTKIDS	.344* (.142)	.062		
CLOSE			-2.235*	-.444
AVERAGE			.433*	.086
WIDE			-1.205	-.240
FAGTHUSB	-.219 (.486)	-.040	-.336 (.616)	-.067
HUSBGIFA	-.346 (.405)	-.062	.576 (.523)	.115
FREQMOB	.815* (.273)	.147	1.116* (.565)	.222
CLOSEKID	----	----	-1.802* (.667)	-.358
WIDEKID	----	----	-.772 (.487)	-.154

\* logit coefficient significant at .05 level or above

\*\* cohort interaction significant

Table 6-4. Logit Coefficients for the Contrast of DOUBLTRK and DTRKAB1 Wives (standard errors in parentheses)

	1 = DOUBLTRK 0 = DTRKAB1			
	Younger Cohort (N = 99) (P = .657)		Older Cohort (N = 82) (P = .561)	
	Logit Coeff.	Pred. Prop. Change	Logit Coeff.	Pred. Prop. Change
Constant	4.164	----	.877	----
FARM	-.878 (.754)	-.198	-.808 (.753)	-.199
LTHS	-.973 (.958)	-.219	-1.564 (.873)	-.335
SOMECOLL	-.555 (1.034)	-.125	-2.226 (1.232)	-.543
COLLEGE	.496 (1.163)	.112	-2.288* (1.064)	-.564
HELEM	-1.747 (1.117)	-.394	.452 (1.040)	.111
HLTHS	.344 (1.057)	.078	-.013 (.782)	-.003
HSONECOL	1.688 (1.056)	.381	-1.777 (1.103)	-.438
HCOLLEGE	.459 (1.200)	.104	.667 (1.563)	.164
HGRADUTE	-.455 (1.599)	-.103	.590 (1.514)	.145
EARLYMAR	-1.328 (.950)	-.300	.492 (1.133)	.121
LATEMAR	----	----	----	----
SHORTINT**	-2.674* (.852)	-.603	.431 (.682)	.106
LONGINT	1.711 (1.044)	.386	2.671* (.989)	.658
CLOSE	-.063 (.788)	-.014	.643 (.924)	.158
WIDE	.848 (1.333)	.191	-1.310 (.808)	-.323
TOTKIDS	-.129 (.195)	-.029	.240 (.195)	.059
FAGTHUSB	.466 (1.191)	.105	1.063 (1.057)	.262
HUSHGTFA	-1.083 (.946)	-.244	-.142 (.816)	-.035
FREQMOB	-1.352* (.696)	-.305	-.766 (.733)	-.189

\* logit coefficient significant at .05 level or above

\*\* cohort interaction significant

Table 6-5. Logit Coefficients for the Contrast of DOUBLTRK and INTERUP Wives (standard errors in parentheses)

	1 = DOUBLTRK 0 = INTERUP			
	Younger Cohort (N = 154) (P = .578)		Older Cohort (N = 143) (P = .678)	
	Logit Coeff.	Pred. Prop. Change	Logit Coeff.	Pred. Prop. Change
Constant	-.003	----	-1.469	----
FARM	.717 (.438)	.175	.177 (.557)	.039
LTHS	1.092 (.668)	.266	-.011 (.653)	-.002
SOMECOLL	.905 (.671)	.221	-.821 (.905)	-.179
COLLEGE	1.143 (.670)	.279	.212 (.689)	.046
HELEM	.443 (.927)	.108	.993 (.738)	.217
HLTHS	.354 (.631)	.086	.186 (.575)	.041
HSOMECOL	.698 (.567)	.170	-1.245 (.831)	-.272
HCOLLEGE	-1.003 (.668)	-.245	-.804 (.946)	-.175
HGRADUTE	-1.809* (.889)	-.441	.939 (.912)	.205
EARLMAR	-.096 (.564)	-.023	-.487 (.797)	-.106
LATIMAR	.914 (.968)	.223	-.288 (.632)	-.063
SHORTINT**	-.054 (.626)	-.013	2.672* (.765)	.583
LONGINT	-.312 (.447)	-.076	.143 (.501)	.001
CLOSE	-1.096* (.459)	-.267	-.038 (.589)	-.008
WIDE	1.706 (.908)	.416	.368 (.752)	.074
TOTFIDS	-.039 (.159)	-.010	.109 (.148)	.024
FAGTHUSB	1.279* (.617)	.312	.887 (.639)	.194
HUSBGTPA	.620 (.471)	.151	-.154 (.531)	-.034
FREQMOB	-.976* (.357)	-.238	-.092 (.432)	-.020

\* logit coefficient significant at .05 level or above

\*\* cohort interaction significant

Table 6-6. Logit Coefficients for the Contrast of INTERUP and TRADITNL Wives (standard errors in parentheses)

	Logit Coefficient	Predicted Proportional Change
1 = INTERUP 0 = TRADITNL (P = .382, N = 301)		
Constant		
CLOSE	-2.590	----
AVERAGE	2.078	----
WIDE	-2.823	----
COHORT	-.782* (.295)	-.044
FARM	-.042 (.312)	-.010
LTHS	-.650 (.426)	-.154
SOMECOLL	-.137 (.425)	-.032
COLLEGE	.467 (.478)	.110
HELEM	.226 (.585)	.053
HLTHS	.707 (.486)	.167
HSOMECOL	.301 (.419)	.071
HCOLLEGE	-.004 (.437)	-.001
HGRADUTE	-.248 (.529)	-.059
EARLYMAR	.815 (.488)	.192
LATEMAR	-.977* (.418)	-.231
SHORTINT	.014 (.486)	.003
LONGINT	.070 (.302)	.017
TOTKIDS		
CLOSE	.732*	.173
AVERAGE	-.371*	-.088
WIDE	.299	.071
FAGTHUSB	-.360 (.436)	-.085
HUSBGTFA	-.204 (.310)	-.048
FREQMOB	-.021 (.219)	-.005
CLOSEPID	.761* (.181)	----
WIDPKID	-.072 (.512)	----

\* logit coefficient significant at .05 level or above

Table 6-7. Logit Coefficients for the Contrast of MIDLIFE and NEVEREMP Wives (standard errors in parentheses)

	1 = MIDLIFE 0 = NEVEREMP			
	Younger Cohort (N = 216) (P = .426)		Older Cohort (N = 179) (P = .430)	
	Logit Coeff.	Pred. Prop. Change	Logit Coeff.	Pred. Prop. Change
Constant	2.208	----	.725	----
FARM	.346 (.511)	.085	.456 (.401)	.112
LTHS	.091 (.497)	.022	-1.334* (.487)	-.327
SOMECOLL	-.549 (.499)	-.134	-.512 (.716)	-.126
COLLEGE**	-1.329 (.753)	-.325	.800 (.776)	.196
HELEM	-.020 (.562)	-.005	.919 (.547)	.225
HLTHS	-.343 (.603)	-.084	-.033 (.523)	-.009
HSOMECOL	.459 (.556)	.112	-.631 (.683)	-.155
HCOLLEGE	-.013 (.568)	-.003	.550 (.701)	.135
HGRADUTE	.197 (.644)	.048	.260 (.754)	.064
EARLYMAR	.867 (.513)	.212	.536 (.565)	.131
LATEMAR**	-2.616* (.625)	-.640	.464 (.478)	.114
SHORTINT	-.532 (.363)	-.130	.162 (.376)	.040
LONGINT	-.981 (.538)	-.240	-.852 (.517)	-.209
CLOSE	.808* (.372)	.198	-.304 (.516)	-.075
WIDE	-1.054 (.794)	-.258	-.020 (.423)	-.005
TOTKIDS**	-.504* (.130)	-.123	-.140 (.091)	-.034
FAGTHUSB	-.680 (.429)	-.166	-.044 (.540)	-.011
HUSBGTFB	-.775 (.423)	-.190	-.257 (.395)	-.063
FNUCHOB	.239 (.273)	.056	-.332 (.362)	-.081

\* logit coefficient significant at .05 level or above

\*\* cohort interaction significant



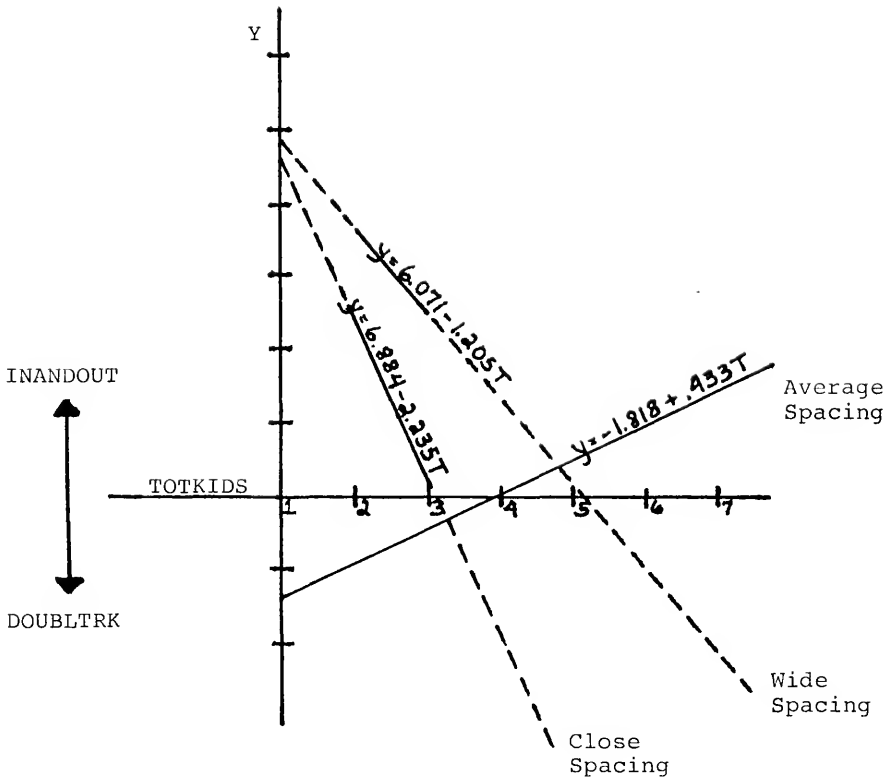


Figure 6-1. Plot of Equations Representing the Relationships between TOTKIDS and Employment Continuity at each level of Birth Spacing, Older Cohort.

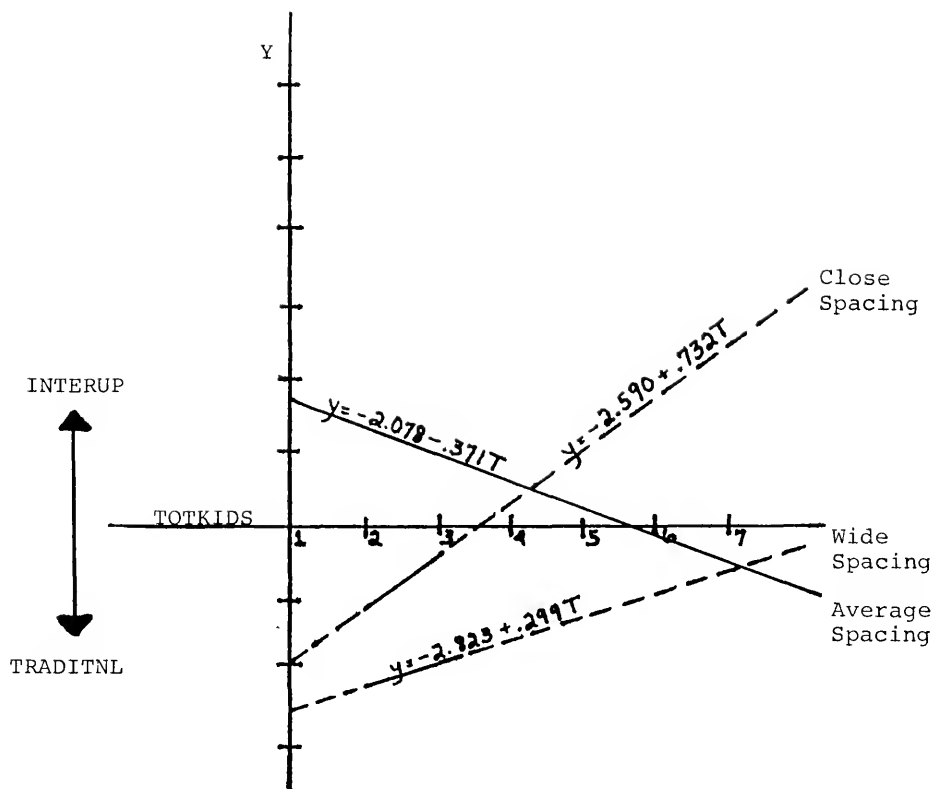


Figure 6-2. Plot of Equations Representing the Relationships between TOTKIDS and Work Force Reentry after Childbearing at each level of Birth Spacing.

## CHAPTER VII CONCLUSIONS

### Issues in Wives' Employment

This study has addressed several issues central to wives' employment. Because most of the wives born between 1923 and 1937 were employed during at least one stage in the family life cycle, the first question to be explored was why some wives remained never-employed. Among the older cohort of wives, who grew up amidst the Depression and married in the years surrounding World War Two, never-employed wives were probably the women whose families needed the income the most. They were women with little education, and women with large families to support. With the post-war male influx into the labor market, the demand for unskilled female labor was probably low. Although the economy was expanding during the post-war period, most of the new jobs were in white-collar occupations. The employed wives in this cohort were those women who had enough education to compete in the post-war job market and/or who had small enough families to afford them the time for outside employment.

Of the wives who grew up during the 1940's and married during the 1950's, the never-employed group does not appear

to be a disadvantaged one. Instead, the constellation of characteristics related to the never-employed pattern in the younger cohort suggests that never-employed younger wives tended to be Catholic women. These women tended to marry later, begin childbearing more quickly, and have larger families than ever-employed younger wives. They also tended to have more highly educated husbands (i.e., higher other family income).

Most of the ever-employed wives in these data worked discontinuously. The second analytical task was to identify factors which distinguish these discontinuously employed wives from wives who worked continuously. Because both of the patterns in this contrast involved at least some employment in every life cycle stage, one can be reasonably certain that all of these women either needed or desired permanent labor force attachment. In both cohorts, wives who were able to maintain continuous employment differed from those who were not in two ways. First, discontinuously employed wives had more children than did continuously employed wives. Although the financial burden of supporting a large number of children probably acts as an inducement to employment, the bearing and rearing of many children necessitates large inputs of time at home. Wives work sporadically as a result of these conflicting pressures, perhaps entering the work force only when financial pressures

are severe or when child care is readily available. Wives who maintain continuous employment are able to do so because fewer children demand less of their time and require a lower expenditure for child care. The second way in which discontinuously employed wives differed from continuously employed wives was in their frequency of migration. Families generally move to improve the husband's employment situation, rather than the wife's; and wives who made frequent long-distance moves were less likely to maintain their own employment continuity. In this relationship, as in others, the direction of causation is ambiguous. This ambiguity is inherent in the research design. Rather than analyzing the relationships between a set of variables measured at time  $t_1$  and employment measured at time  $t_2$  (or employment measured at  $t_1$  and other variables measured at  $t_2$ ), this analysis examined the associations between lifetime employment patterns and family characteristics often spanning the life cycle, as well. The permanent labor force attachment of continuously employed wives may have been made possible, in part, by their relatively low geographical mobility, (i.e., frequency of mobility may cause employment continuity) or it may be that the degree of wife's labor force attachment is a factor considered in the decision to move. That is, wife's labor force attachment may cause frequency of mobility in that wives who would rather not work may be more willing

than other employed wives to give up their jobs, and their families may be more likely to move as a result.

The third issue addressed by this research involved the factors related to wives' employment before, during, and after childbearing. Before childbearing begins, both husband's income and the demands of other roles tend to be low. If the length of the interval between marriage and first birth is a short one, wives tend not to be employed. Some wives may not seek employment in the first stage because they plan to begin childbearing soon after marriage. Others may not work because a pregnancy occurred before they were able to find a job. In either case, the only factor considered that distinguished wives who did not work during the first life cycle stage was having an early first birth.

Employment during childbearing is related to both fertility patterns and husband's education. Wives who worked before and after, but not during childbearing were more likely than wives employed in every stage to have had closely spaced births. They were also more likely to have higher educated husbands. Again, the direction of causality is ambiguous. It may be that otherwise continuously employed wives who wish to remain at home during childbearing space their births closely to minimize the length of that stage. A high husband's income may facilitate this strategy. It also may be that wives with closely spaced births

are unable to continue their employment during childbearing because a new baby is born just as the intensive care required by the previous child has ended.

Employment after childbearing was related to both number of children and marital timing. Previously employed wives who failed to return to the work force after childbearing were those wives who had married late and those who had a large number of children. Because both these factors would tend to advance the age at which childbearing ends, employment after childbearing may be a function of wife's age at the end of the childbearing stage.

#### Policy Implications

Policy aimed at facilitating wives' employment might be comprised of programs to help women gain job skills or renew previously acquired skills, programs to aid them in securing employment or programs to facilitate child care. Job skill attainment or retention is generally a problem for wives who reenter the work force after a lengthy absence and for wives who initially enter the work force in mid-life. The present research has indicated that previously employed wives who fail to return to the work force after childbearing are women who married late and those who had a large number of children. The same was true of some of the wives who initially entered the work force in mid-life.

If wives not employed since first birth remain out of the work force after childbearing due to their lack or disuse of job skills, programs aimed at retraining them might encourage more mid-life wives to seek employment.

One's ability to find a job is partially dependent on the overall unemployment rate. Yet regardless of the state of the economy, some wives have more difficulty in securing employment than do others. The present research has indicated that residential migration is associated with employment discontinuity among wives. If frequent mobility disrupts wives' employment (i.e., if geographically mobile wives desire continuous employment), a program aimed at helping these women find jobs in their new communities might be a successful one.

Finally, child care may have been a serious and recurrent problem for many of the wives in these data. The present research has found that wives who were not employed after childbearing tended to have many children. Many never-employed wives were women with little schooling and/or many children, as well. These women were probably in need of additional income, but may not have worked because they were unable to afford the expense of private child-care. If so, a program aimed at increasing the availability of inexpensive, quality day care might have facilitated employment among both groups of wives.



Implications for Future Research

This research has two general implications for future studies of wives' employment. The first point involves the conceptualization and measurement of wives' employment, and the second concerns the study of cohort differences in wives' employment.

For nearly all wives, the discontinuous nature of their employment requires that it be conceptualized as a process and measured over the life cycle. Wives' employment is discontinuous in that it is typically characterized by work force entry and withdrawal, resulting in intervals of employment and nonemployment over the life cycle. For some wives, these intervals coincide with life cycle stages, while for others, employment is sporadic and not related to specific stages. Employment patterns are useful tools in that they tap the discontinuity of employment and measure its timing in relation to other life cycle events. However, the reconstruction of individual employment patterns requires longitudinal work history and fertility-timing information. Fortunately, large-scale panel study data on female labor market experiences are now readily available. If we are to understand the factors related to wives' employment, or if we are to appreciate its consequences, longitudinal data must be used to measure the extent and timing of labor market activity and to study the patterns which result over time.

The second point to be made concerns the importance of considering birth cohort in studies of wives' employment. The present research has found that wives in the 1920 and 1930 birth cohorts did not differ significantly in the ways their employment was timed. Yet the past two decades have been characterized by great social and economic change, which has had a significant impact on women's roles. During the 1960's, the employment rate among mothers with preschool children increased faster than that of other wives, and it may be that the timing of wives' employment has changed among younger cohorts. If appropriate data are available, future research might pursue a cohort analysis of employment patterns through the later life cycle stages. The present research did find that the factors related to wives' employment are changing ones. That is, the effects of family characteristics on wives' worklives often do vary by cohort. Findings concerning the employment of one cohort of wives can not be generalized to others. Instead, future research should study both wives' employment patterns and the factors related to these patterns among successive cohorts.

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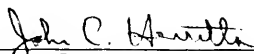
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

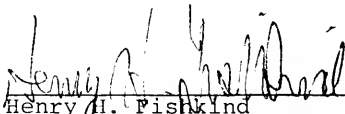
  
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

A handwritten signature in dark ink, appearing to read "Henry H. Fishkind", is written over a horizontal line.

Henry H. Fishkind

Associate Professor Economics and  
Assistant Director, Bureau of  
Economic and Business Research

This dissertation was submitted to the Graduate Faculty of the Department of Sociology in the College of Liberal Arts and Sciences and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December, 1980

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